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THE INTERNATIONAL INSTITUTE OF AGRICULTURE.

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The Institute, confining its operations within an international sphere, shall:

(a) Collect, study, and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, the commerce in agricultural products, and the prices prevailing in the various markets.

(b) Communicate to parties interested, also as promptly as possible, the above information.

(c) Indicate the wages paid for farm work.

(d) Make known new diseases of plants which may appear in any part of the world, showing the territories infected, the progress of the diseases, and, if possible, the remedies which are effective.

(e) Study questions concerning agricultural co-operation, insurance and credit in all their aspects; collect and publish information which might be useful in the various countries for the organisation of work connected with agricultural co-operation, insurance and credit.

(f) Submit to the approval of the Governments, if there is occasion for it, measures for the protection of the common interests of farmers and for the improvement of their condition, after having utilized all the necessary sources of information, such as the wishes expressed by international or other agricultural congresses, or by congresses of sciences applied to agriculture or agricultural societies, academies, learned bodies, etc.

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Part I: Co-operation and Association

BELGIUM.

THE WORK OF THE "BOERENBOND" (PEASANTS' LEAGUE) IN 1913.

SOURCES:

- BOERENBOND BELGE OU LIGUE DES PAYSANS. EXERCISE 1913. RAPPORT SUCCINCTEMENT PRÉSENTÉ À L'ASSEMBLÉE GÉNÉRALE DU 1 JUIN 1914, PAR LE CHANOINE E. LUYTGAERENS, S. Th. B., SECRÉTAIRE GÉNÉRAL (*The Belgian Boerenbond or Peasants' League, Year 1913. Brief Report presented at the General Meeting, June 1st, 1914, by Canon E. Luytgaerens, S. Th. B., General Secretary*). Louvain, 1914.
- EXPOSÉ STATISTIQUE DE LA SITUATION DES ASSOCIATIONS D'INTÉRÊT AGRICOLE PENDANT L'ANNÉE 1913. MINISTÈRE DE L'AGRICULTURE ET DES TRAVAUX PUBLICS. ADMINISTRATION DE L'AGRICULTURE (*Statistical Statement on the Position of Agricultural Associations in 1913. Department of Agriculture and Public Works, Agricultural Division, Brussels, 1914*).

The *Boerenbond*, as we know, is the most important organ of the agricultural co-operative movement in Belgium. It was founded in 1899, when the active movement in favour of agricultural organisation first started as a result of the efforts of Abbé Mellaerts, of Helleputte, and of Schollaert, and its purpose is threefold: 1st., to protect the moral and material interests of the peasants; 2nd., to improve agricultural legislation; 3rd., to organise agriculture in guilds or corporations. With this end in view, it encourages and groups around it the *boerengilden*, or parochial associations of peasants, which are the nuclei whence spread a number of co-operative organisations (associations for collective purchase and sale of products, rural loan societies, co-operative dairies, mutual insurance associations etc.) for improving the condition of the rural classes.

In order to carry on its manifold action, the *Boerenbond* divides up into several sections, as follows: (1) the Farm-women's League; (2) the General Federation of Horticulturists; (3) the Purchase and Sale Office; (4) the Central Credit Bank; (5) the Inspections Office; (6) the Insurance Section; (7) the Office for Consultations, Lectures etc.

The *Boerenbond* is managed by a Board of Directors and by a Superior Council. The first consists of a chairman, vice-chairman, general secretary, whose duty it is to attend to the current business of all the sections, three commissioners, and a treasurer. The second consists of the members of the Board of Directors and of delegates from the affiliated *guilds*, selected by the provinces, and consisting in all of 35 members (1).

We shall now set forth the work of this important Federation (2) as shown in its latest report.

§ 1. THE ASSOCIATIONS ADHERING TO THE "BOERENBOND" AND ITS SERVICES OF A GENERAL DESCRIPTION.

1. *Affiliated Associations.* -- At the close of 1913 the *Boerenbond* numbered 500 affiliated associations (3), of which 567 are agricultural guilds and 32 horticultural societies (4). At that date the number of members amounted in all to 53,680, representing as many families. The membership has increased during the past decade in the following manner :

Year	Members
1903	21,812
1905	31,586
1907	38,049
1909	43,169
1911	46,899
1913	53,680

(1) At the close of 1913 the various offices of the *Boerenbond* employed 114 persons.

(2) Although the *Boerenbond* is the typical federation of the Flemish region, having most of its scattered units in the provinces of Brabant, Antwerp, Limbourg, and in West Flanders. It carries on its work throughout the country and thus assumes the character of a National Federation.

(3) The affiliated associations pay into the federal funds an annual quota of one franc each which entitles them to avail themselves of the services of the League and to receive its monthly organ, "*Le Paysan*".

(4) Whenever conditions permit, the horticultural societies form so many sections of the local agricultural guilds, of which they are thus an integral part. When this is not practicable these societies retain their independence, although they continue to be admissible to the *Boerenbond*. The 32 horticultural societies, above mentioned belong to this category of autonomous societies affiliated to the *Boerenbond*.

There has thus been during this period an increase of 31,877 members.

As we cannot describe in detail the work of the several affiliated associations, we shall merely remark that the services which they perform are continually increasing in importance, as is shown by the several monographs of the *Boerengilden* published in the Report above referred to. We shall give a few examples.

The *Agricultural Guild of Rethy*, working in the commune of that name, in the province of Antwerp, with 3,400 inhabitants, was founded in 1894 and now has 180 members. It possesses a section for collective purchases, which in 1913 received orders for goods amounting to 60,000 francs; its mutual association for the insurance of cattle and horses has insured 1,400 head for the approximate sum of half a million francs; it has a branch for fire and accident insurance, as well as an association of horticulturists for the scientific cultivation of vegetables.

The local correspondent of the *Boerenbond* says that it is not possible to show all the progress made by agriculture in this region in recent years, progress which has been actively promoted by the association of which we are now speaking. There is no longer a farm which is not provided with the necessary machinery (threshing machine, straw-cutting machine, cream-separator etc.) Moreover, each year new buildings are put up, such as warehouses, stables, and farm labourers' houses. The country is well cultivated, green clover meadows and rich pasture lands stretch out on all sides. The live-stock more especially contributes to the prosperity of the farmers. It is not exceptional to find a farm-woman owning a dozen cows and taking from 40 to 50 kilograms of butter to market. In 1913 a farm-woman who owned 14 cows succeeded in selling for 25 consecutive weeks over 50 kilograms of butter. At the same time the farm-people are better fed, thanks to the propaganda carried on by the itinerant schools of domestic economy, and their moral conditions have likewise improved.

The *Agricultural Guild of Bocholt*, in Limbourg, is one of the oldest societies affiliated to the *Boerenbond*, as it was founded in 1892. Besides the parish of the same name, which numbers 2,200 souls, this Commune also includes a village of 800 inhabitants. The Guild of Bocholt numbers 205 members. It has devoted special attention to the professional training of its members, organising practical courses in agriculture and horticulture. It also possesses a branch office for collective purchases, which amounted to 67,000 francs in 1913. It has likewise organised a rural bank which, since its establishment in 1898, has granted 270 loans for an amount of 601,110 francs. At the close of 1913, it had opened 99 savings accounts, representing in all 351,128 francs. This guild also has a branch for cattle insurance with 310 members who have insured 1,117 dairy cows for nearly half a million francs. Lastly, through the services of the Guild, 100 members are insured against fire for 1,600,000 francs.

The local correspondent of the *Boerenbond* expresses great satisfaction at these results. Co-operation and association, he remarks, have induced the farmers to comply with the dictates of scientific agriculture. As a result of the increased consumption of chemical fertilisers, over 400 hectares of

uncultivated land have, during the past decade, been converted into good pasture lands. Moreover, the farmers have been familiarised with agricultural machinery, especially with those implements adapted to small holdings. Many stables and farm-buildings have been improved, and the livestock also is more numerous and of better quality. All this has led to greater prosperity amongst the rural population.

These and the very many other instances which we could quote clearly show the activity and value of the work performed by these agricultural guilds. They are to be found throughout the country and have become an integral part of its local life.

2. *The Superior Council of the Boerenbond and its General Services.* — The Superior Council, formed as above described, besides attending to its ordinary administrative duties, has busied itself at its quarterly meetings with several matters connected with agriculture, rural institutions, and social legislation. Amongst the questions dealt with in 1913, mention must be made of proposals for legislation on labourers' dwellings, social insurance, primary agricultural training, proposals now before the Belgian Parliament etc.

The free consultations office also worked actively during the year under consideration, supplying answers to several hundred enquiries. Nor was the correspondence work less intense, as is shown by the fact that no fewer than two hundred thousand letters and circulars were sent out by the several offices.

Five hundred and ninety-nine lectures were organised by the different sections of the *Boerenbond*.

A library was also placed at the service of members so as to afford instruction to the more intelligent farmers, and on December 31st., 1913, 149 names were entered in its books.

Amongst the institutions promoted by the *Boerenbond*, mention must be made of the "Chaplains' Clubs", formed amongst the spiritual directors of the rural guilds, in order that they may exchange ideas and fit themselves better and better for the mission entrusted to them. It is their duty to watch over the guilds and their sections and see that they preserve "the spirit of Christian charity". Three such clubs are in existence, one for the province of Antwerp, (founded in 1907 with 87 members) one for Brabant (82 members) and another for West Flanders. They hold one or more meetings a year.

§ 2. THE CENTRAL SECTIONS OF THE "BOERENBOND".

As we have seen, the "*Boerenbond*" is subdivided into seven principal sections differing in work and aims. We shall review them rapidly, paying however special attention to the Central Credit Bank.

1. *The Farm-women's League.* — This League, the last established of the central sections of the *Boerenbond*, was founded on July 6th., 1911.

On December 31st., 1913, it centralised 117 farm-women's clubs (2 on December 31st., 1911), with 12,904 members (1) distributed in the several provinces as follows: Antwerp 37, Limbourg 28, Brabant 24, West Flanders 20, East Flanders 6, Hainault 2.

During 1913, the League gave 206 lectures on a variety of subjects, amongst others on the value of women's associations, on domestic economy, on the rearing of live-stock, on cheese-making, on hygiene etc.

Hitherto the activity of the affiliated clubs has been almost exclusively devoted to the professional training of their members, for which purpose they have organised lectures (458 in 1913), practical lessons, prize competitions, and small libraries (2).

But for some little time past the need has been felt of giving a more practical direction to these organisations by seeking to make them serve not only, as they now wisely do, for providing technical and intellectual training for the farm-women, but also for ensuring their members material advantages, such as would result from the establishment of mutual or co-operative institutions. The League is carrying on an active propaganda with this end in view, the first results of which are already visible. At the close of 1912 the Parc-Héverlé Club, with 74 members, organised a savings bank for them, which at the end of the first year had opened 36 savings accounts. The holders of the savings' books generally use their accumulated savings to meet some special expenditure, or sometimes the money is set aside for the use of another institution founded by the club for the collective purchase of fuel (coal etc.). At present the committee which directs the Parc-Héverlé Club is studying a proposal for the establishment of a friendly society among its members.

Another club, that of Moll in the province of Antwerp (49 members), established in 1911, is studying a proposal for a mutual insurance fund for old age pensions for women only.

One of the most active clubs is that of Betecom (Brabant) founded in 1908 and numbering 138 members. The local correspondent of the "*Boerenbond*" wrote of this club as follows: "There is no doubt that a farm-women's club can render valuable services to the inhabitants of a rural commune. Each of our meetings is the occasion for a lecture, prepared with scrupulous care, on the most varied questions relating to domestic economy, the training of women, the education of children etc. Moreover, business and pleasure are combined, and singing is always a feature of these gatherings. The farm-women in their anxiety to learn pay close attention to the lessons given them. It is therefore not surprising that empiricism is giving way in family life gradually to order, hygiene, and rational economy."

The club meetings generally close with a lottery at which useful objects are distributed such as packets of flower and fruit seeds, ingred-

(1) The members pay to the federal funds an annual subscription of 60 centimes.

(2) The Farm-women's Club at Nederheim in Limbourg, has a library with 600 books.

ients for preserves, apparatus for drying clothes, and other articles of domestic use.

2. *The General Federation of Horticulturists.* — With a view to improving market-gardening and encouraging its subsidiary industries by technical training, the study of markets, and the organisation of collective purchase and sale, the Peasants' League has promoted this Federation which forms a special section of the "*Boerenbond*". Small market-gardeners unite in local associations which, as a rule, form branches of the rural guilds, and are centralised in the General Federation. This organisation was founded on the 6th. of December, 1910, and on December 31st., 1913, it grouped together 87 associations of horticulturists with a total membership of 2,727.

During the year under consideration, 193 lectures were given for the technical training of members; and 250 visits were paid to business houses and societies for the sale of products. The collective sale of vegetables made on behalf of the members led to 2,116 transactions for a total value of 480,128 francs.

The Federation also undertakes to purchase selected seeds: in 1913 it sold to its members 1,462 kil. grams for 4,085 francs.

3. *Collective Purchase and Sale Office.* — During 1913 this Office, which is organised as a limited liability society, purchased on behalf of the affiliated agricultural guilds and of private members (a) chemical fertilisers: kg. 36,810,460 for 2,493,838.06 francs; (b) Cattle foods: kg. 42,773,527 for 7,850,031.51 francs.

The following table shows the growth during the past fifteen years of the purchasing branch of the *Boerenbond* as far as fertilisers and cattle foods are concerned.

TABLE I. — *Growth of the Purchasing Business of the "Boerenbond".*

Year	Fertilisers		Cattle Foods	
	Kg.	Ft.	Kg.	Ft.
1898	12,717,405	657,880.09	6,154,038	857,583.17
1899	13,091,785	804,506.10	6,723,015	891,380.00
1900	13,500,555	739,791.31	6,550,418	1,111,168.62
1901	16,860,083	879,449.08	8,087,241	1,195,101.08
1902	16,853,164	957,473.99	11,975,131	1,667,098.55
1903	21,170,028	1,001,300.19	16,873,417	2,025,790.33
1904	23,520,951	1,086,007.02	21,129,235	3,395,562.74
1905	25,621,752	1,237,392.08	21,295,744	3,934,559.23
1906	28,545,853	1,447,959.37	25,928,384	4,270,518.68
1907	29,533,602	1,612,257.22	39,751,583	5,494,864.85
1908	28,349,043	1,759,175.91	34,126,972	6,439,717.47
1909	28,379,089	1,732,934.21	34,224,780	6,610,941.38
1910	30,643,874	1,733,371.78	33,549,065	6,308,200.07
1911	30,042,449	1,721,775.95	39,972,392	7,193,133.10
1912	32,398,253	2,002,770.28	38,617,192	8,075,068.51
1913	36,810,160	2,493,858.96	42,773,647	7,859,931.51

(c) Seeds: kg. 381,689 for 126,210.98 francs, as compared with kg. 17,399 for 6,200 francs in 1899.

The "Boerenbond" also owns at Antwerp a warehouse which, during 1913, delivered 35,811,502 kilograms of cattle foods, and 4,675,373 kilograms of fertilisers. Nor must we forget the two branch establishments at Hasselt and Louvain, the former of which supplied during the same year 2,982,004 kilograms of cattle foods and 1,702,070 kgs. of fertilisers for a total value of 645,795.49 francs. The Louvain branch, only recently opened, from the 1st. of August to the 31st. of December, 1913, supplied 734,382 kgs. of cattle food and 266,173 kgs. of fertilisers.

(d) The value of the agricultural machinery and dairy apparatus delivered by the Purchasing Office during 1913 amounted to 159,795.41 francs, of which 39,756 francs for machinery and 120,039 francs for dairy appliances.

In all, the Purchase and Sale Office filled 8,581 orders in 1913; it had a cash turnover of 23,650,821.98 francs as compared with 3,019,660 francs in 1899 and did a total business of 64,682,081.66 francs as compared with 8,576,937.56 francs in 1899.

In connection with this section of the *Boerenbond* there is an office for the inspection of co-operative dairies. On December 31st., 1913, 117

dairies were affiliated to it, 110 of which had 15,355 members, treating 128,450,867 kgs. of milk. This office organises lectures and courses of technical instruction, with visits to the affiliated institutions, supplies technical advice, and has a special laboratory for analysing butter and milk.

And now, in view of its importance, we shall deal specially with another section of the *Boerenbond*, the Central Credit Bank.

§ 3. THE CENTRAL CREDIT BANK.

The Central Credit Bank of the *Boerenbond*, organised as a co-operative society, is a federation of local loan and savings societies of the Raiffeisen type. It is concerned not only with personal agricultural credit but also with rural land credit. This central bank receives from the local societies the funds which they cannot employ in loans to their members, and out of this capital it makes loans to those the funds of which are inadequate for their requirements. We shall briefly examine its situation at the close of 1913.

Affiliated local Societies. — On December 31st., 1913, 378 of the 762 rural loan and savings banks in Belgium were affiliated to the Central Bank. The increasing number of the federated banks as compared with the total number of loan and savings banks in the Kingdom is shown by the following table:

TABLE II. — *Number of Raiffeisen Banks affiliated to the Central Bank of the Boerenbond.*

Year	Number of Rural Banks in Belgium	Number of Banks Affiliated to the Central Bank
1897	139	95
1899	230	148
1901	284	183
1903	361	195
1905	431	215
1907	540	268
1909	618	297
1911	697	333
1913	762	378

The largest numbers of affiliated banks are to be found in the provinces of Brabant (100), Limbourg (69), and Antwerp (65).

Opening of Accounts. — In 1913 the Central Bank of the *Boerenbond* opened 39 accounts with affiliated loan banks for sums amounting to 746,00 francs.

Between 1897 when the Central Bank began this service and 1913 the loan banks opened 498 credit accounts for 3,953,400 francs. On December 31st., 1913 their indebtedness to the Central Bank amounted to 1,078,537.63 francs.

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Capital of the Central Bank. — On the 31st. of December, 1913, the Bank possessed a reserve fund of 7,671,000 francs, in 7,671 shares. This capital increases from year to year, thanks to a rule which requires that for every 1,000 francs of credit granted to an affiliated bank the latter must subscribe a 100 francs share. The following data show the notable development of the share capital or guarantee fund of the Central Bank of the Boerenbond :

TABLE III. — *Growth of the Capital of the Central Bank.*

Year	Number of Shares Subscribed	Share Capital
1897	220	220,000
1900	820	820,000
1903	1,211	1,211,000
1906	2,211	2,211,000
1909	3,875	3,875,000
1912	6,537	6,537,000
1913	7,671	7,671,000

Turnover. — The turnover for 1913 amounted to 49,766,292 francs (as compared with 522,058 francs in 1897) or an average of over 4,000,000 francs a month.

Savings Deposits. — On December 31st., 1913 the Central Bank had in deposit : (1) 15,517,251.29 francs paid in by the affiliated banks, and (2) 593,119.88 francs paid in by private persons, or a total of over 16,000,000 francs. The following data in regard to the increase of the deposits paid into the Central Bank will be found of interest :

TABLE IV. — *Increase of the Deposits paid into the Central Bank.*

Year	Deposits of Local Banks	Private Deposits
1897	37,487.85	28,436.08
1900	293,269.86	85,622.46
1903	2,249,611.75	131,796.49
1906	5,785,479.72	274,782.34
1909	9,025,228.95	398,885.01
1912	15,130,496.90	535,291.34
1913	15,517,251.29	593,119.88

The funds thus entrusted to the Central Bank of the Boerenbond are invested in conformity with the decisions of its General Meeting.

Land Loans. — In 1904 the Central Bank of the Boerenbond opened a *Land Credit Section* for farmers. Loans are granted both by the local banks at an interest of 4 $\frac{1}{4}$ %, and by the Central Bank at a rate of 4 $\frac{1}{2}$ % for loans of less than 5,000 francs and 5 % for loans exceeding 5,000 francs. The Central Bank does not, however, transact business directly except with farmers in communes which have no local banks.

The local banks procure the necessary capital for these transactions from the Central Bank, which advances it to them at 4 % interest. The Central Bank in its turn secures the requisite capital by issuing land bonds (for 100, 200, 500, and 1,000 francs, at 3.6 % interest) for an amount corresponding to the value of the mortgages which it holds.

These bonds are secured (a) by the capital and reserve funds of the Central Bank, which, on December 31st., 1913, amounted to about 7,000,000 francs; (b) by the mortgages which the Bank itself possesses; (c) by the unlimited liability of the members of the Raiffeisen banks for the loans which they make.

As in the case of other credits, the local banks must subscribe a hundred francs share for each thousand francs thus lent by the Central Bank.

The loans may not exceed $\frac{1}{3}$ rds. of the value of the land on which they are made, and they are granted for terms varying from 1 to 29 years; they are repayable in half yearly or yearly instalments, though the loan may be paid off at an earlier date.

In 1913 the Central Bank made, through the agency of the local banks, 71 loans for 386,250 francs, and it arranged directly 40 such loans amounting to 290,000 francs, thus providing in all 111 loans for an amount of 676,250 francs. The largest sums were distributed in the provinces of Antwerp (208,700 francs) and Limbourg (184,750 francs).

Since its foundation, the land credit section of the *Boerenbond* has made the following mutual loans:

TABLE. V. — *Increase in Land Credit Operations.*

Year	Through Local Banks		Direct Loans	
	Number	Value	Number	Value
1904	21	71,600	15	77,800
1905	62	394,100	26	68,440
1906	37	149,500	48	226,840
1907	36	265,600	41	160,550
1908	45	205,000	38	204,520
1909	54	300,150	26	120,500
1910	96	351,695	40	207,550
1911	94	434,850	36	162,975
1912	134	689,000	48	401,200
1913	71	386,250	40	290,000
Total . . .	650	3,247,745	358	1,920,375

The loans are classified as follows according to their value :

		Loans made through		Direct
		Local Banks		Loans
From	I franc to	1,000 francs	103	48
"	1,001 " "	2,000 "	178	82
"	2,001 " "	3,000 "	126	71
"	3,001 " "	4,000 "	83	34
"	4,001 " "	5,000 "	33	31
"	5,001 " "	10,000 "	64	43
"	10,001 " "	20,000 "	40	36
"	20,001 " "	30,000 "	13	6
"	above	30,000 "	10	7
		Total	650	358

Most of these loans were made for the purchase and erection of buildings and for the purchase of land.

In accordance with an arrangement recently made between the Central Bank of the *Boerenbond* and the French Life Insurance Company, "*L'Urbaine*", the borrower is enabled to take out, simultaneously with his loan, a life insurance policy. On the payment of a year's premium the Life Insurance Company guarantees payment of any annuities still due on the loan should the borrower die, thus freeing his heirs from a burden which is often heavy.

Transactions of the local affiliated loan banks. — The following data referring to December 31st., 1912, are available in regard to the transactions of the loan banks affiliated to the Central Bank of the *Boerenbond*.

- (1) Number of Affiliated Banks on December 31st., 1912. 363
- (2) Number of Members. 27,132
- (3) Value of Shares Paid up by Members on December 31st., 1912. 80,866.00
- (4) Savings Deposits:
 - (a) Received in 1912 12,187,852.91
 - (b) Refunded in 1912. 9,129,086.82
 - (c) Received from Date of Foundation (1897) up to December 31st., 1912 84,618,588.55
 - (d) Existing on December 31st., 1912. 30,125,185.67
- (5) Loans:
 - (a) Made in 1912, Number 3,588 for. . . francs 6,159,184.98
 - (b) Refunded in 1912 3,638,710.66
 - (c) Made since 1897 up to December 31st., 1912, Number 36,458, for francs 38,319,869.15

(d) Security of Loans made from Date of Establishment :

Loans Secured by Sureties	33,577
" " " Preference Mortgage	667
" " on Pledge	292
" " on Life Insurance	30
" " on Mortgage of Land	1,892
	<hr/>
	36,458

(e) Object of Loans :

Purchase of Feeds for Cattle, Fertilisers etc.	5,155
" " Cows, Horses, Pigs	11,970
" " Agricultural Machinery	714
" " Land	3,114
" " Houses	2,825
Building or Repair of Houses, Stables, Warehouses etc.	3,338
Repayment of Debts	3,549
To Pay off Co-heirs	689
To Start in Business	2,296
Various	2,808
	<hr/>
	36,458

(f) Value of Loans on December 31st., 1912 . . 15,678,720.7

(g) Reserve fund :

Special Reserve Fund on December 31st., 1912	34,544.5
Ordinary Reserve Fund	449,055.1
Emergency Fund	265,434.8

If we compare these data with those for previous years, which we omit here for the sake of brevity, they show a constant increase in the business transacted by the affiliated banks.

§ 4. OFFICE FOR THE INSPECTION OF THE SOCIETIES AFFILIATED TO THE "BOERENBOND".

This Office, which was originally annexed to the Central Credit Bank, now forms an independent section of the *Boerenbond*. It exercises supervision over the Raiffeisen banks affiliated to the Central Bank, over the farm-women's clubs, and over the rural guilds and purchasing sections which request its services. All the institutions subject to its supervision are visited at least once a year by an inspector who examines the management and the books.

In 1913 the inspectors of the *Boerenbond* paid 454 visits to the rural banks, 381 being ordinary visits for the annual auditing of the books, and 73 special visits for the purpose of giving preliminary instructions to the

managers of new rural banks, affording legal assistance to banks in liquidation etc. Besides this, the Office arranged for 50 lectures on agricultural credit.

During the same year, 160 agricultural guilds and purchase sections were inspected and 61 lectures delivered to them on technical questions. The Inspection Office aims more especially at perfecting the organisation and working of these societies, supplying them with good bye-laws, and watching over their strict observance.

Inspectors also paid 88 visits to the farm-women's clubs in 1913, with a view to ensuring simplicity and order in their management.

* *

As already stated, the *Boerenbond* also has a branch for insurance against fire, hail, loss of live-stock, and for life-insurance. We deal with the work of this important branch in the section of the Bulletin devoted to insurance.

FRANCE.

THE CO-OPERATIVE DAIRIES OF THE CHARENTES AND POITOU.

SOURCES :

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- RODRAY (A) : Etude sur les beurrieres cooperatives et l'industrie laitière dans le département des Deux-Sèvres, Niort, 1900 (*Account of the Co-operative Butter Factories of the Department of Deux-Sèvres, Niort, 1900*).
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- THEAINE (P) : Les laïteries cooperatives en France. Lille, Camille Robbe, 1900 (*Co-operative Dairies in France, Lille, Camille Robbe, 1900*).
- RIGNAUX : Les laïteries cooperatives en France : organisation, fonctionnement et résultat (*Publications de la Société des Agriculteurs de France*). Paris, Morillot, 1895 (*Co-operative Dairies in France, their Organisation, Working and Results (Publications of the Society of Agriculturists of France) ; Paris, Morillot, 1895*).
- L'INDUSTRIE DU BEURRE, journal hebdomadaire, organe officiel de l'Association centrale des Laïteries coopératives des Charentes et du Poitou (" *The Butter Industry* ", *Weekly Official Organ of the Central Association of the Co-operative Dairies of the Charentes and of Poitou*).

§ 1. ORIGIN AND DEVELOPMENT OF THE CO-OPERATIVE MOVEMENT.

A portion of the departments of Charente and Charente-Inférieure and the southern part of that of Deux-Sèvres, comprised under the name of Saintonge, was formerly rich as a vine-growing country.

But when the phylloxera appeared, its prosperity rapidly vanished : in 1880 hundreds of hectares had already succumbed to the ravages of the plague, and in 1885 took place the last vintage in the southern part of Deux-Sèvres.

The wine growers were ruined, they had lived from day to day without thought for the morrow and a great part of their land lay fallow. The more industrious, having rooted up the now useless vines, tried to grow some corn, and above all to sow their ground with lucern, sainfoin and clover. These meadows produced good crops, thus enabling their owners to keep some dairy cows.

This was new work for them, and the making of butter was almost unknown. Just at this time butter-making by machinery had been introduced, for it was in 1878 that the first centrifugal separator appeared in France.

Industrial dairies prospered rapidly, for they had absolute command of the situation; they bought, at a ridiculously low price, milk which for the want of markets the farmers could not utilise. The profits however of the new industry did not compensate for the loss of the vineyards.

In 1884, the law concerning professional syndicates was passed by Parliament. There were difficulties to overcome in its elaboration, there was much discussion, and the services which it would render to agriculture were dwelt on insistently. In 1888 at Chaillé the first co-operative dairy was founded. Its methods were of the most rudimentary character, and not always in accordance with the latest scientific discoveries. Notwithstanding, its success was rapid; in the first year it made use of 589,600 litres of milk.

Its example was followed in all the southern part of the department of Deux-Sèvres, in La Vendée and even more in Charente-Inférieure. Since 1895 there have been 70 associations, using 91,021,000 litres of milk, making 5,239,900 kilogrammes of butter for about the value of 12,250,000 francs.

Unfortunately these new societies were content to imitate the first established without improvement in the buildings, nor yet in the plant, nor in the code of rules. At length there were signs that the industry might come to an end; in the department of Charente, the people began to replant the vineyards giving up all effort to increase the dairy industry. In the north, where the rural population was composed chiefly of farmers, every attempt failed on account of the hostility of the landlords who preferred to compel their tenants to send their milk to an ordinary commercial butter factory rather than permit them to form co-operative societies.

Such was the state of affairs when in 1897, the Department of Agriculture commissioned M. Martin, director of the dairy industry of Mamirolle, to visit the district. His lectures and advice, eagerly listened to, induced the farmers to resume the work and at the same time to correct the errors of the earlier establishments. In the whole region new life arose, and in 1898 there were 88 societies taking in 144,470,000 litres of milk, and making 6,828,000 kilogrammes of butter. About this time, the dairies of La Crèche, Echiré and Surgères were definitely established, and these may be looked on as models.

In the same year, M. Dornic arrived at Surgères, and under him the co-operative dairies almost attained perfection from a technical point of view. In this village there was established a dairy with a laboratory in which the best means for the treatment of milk were studied, and a cattle-shed in which experiments in feeding were made. All the dairies of the district, when in any difficulty, turned to the dairy of Surgères for advice. Little by little, M. Dornic educated the whole population of the region and, as a proof of this statement, here at the present time where economy prevails to the last de-

gree, the Administrative Council of a dairy does not hesitate to risk spending from 10,000 to 15,000 francs, when it knows that such an outlay will be compensated for by improvement, both in quantity and quality of produce.

But in one respect perfection had not been attained; a commercial organisation was still wanting to procure at the lowest price the necessary utensils and appliances and ensure good sales. The various co-operative societies soon came to recognize this necessity, so that in 1893 the Central Association of Co-operative Dairies of the Charentes and Poitou was founded, and this association soon included nearly all the dairies of the district.

It began its work humbly by buying charcoal and calico (for wrapping butter) for the associated societies. But by degrees, owing to the efforts of its president, M. Rouvier, it became more ambitious. In 1897 it appointed an inspecting committee; in 1903 it founded a professional dairy-school at Surgères, of which it undertook the management, assisted by the Government. It directly helped the butter industry by furnishing the co-operative dairies with competent workmen and by bringing refrigerating machinery into common use.

But it is in the output of its produce that the association has been chiefly useful. Since 1897 it has had a service of refrigerator trucks for the conveyance of butter to Paris. It also exercises a considerable influence on carrying companies and sale agencies. It makes itself acquainted with the produce of syndicates and takes part in competitions and exhibitions in France and elsewhere.

§ 2. ORGANISATION OF A CO-OPERATIVE DAIRY.

According to M. A. Rozeray, to whose experience the co-operative dairies of Deux-Sèvres are much indebted, a good dairy requires;

- (1) An abundance of excellent water;
- (2) A slope sufficient to ensure that the water used for washing be completely and rapidly carried off;
- (3) That the dairy should be so situated that within the smallest possible radius it can be supplied with 5,000 litres of milk per day.

Those companies that have not taken these three conditions into account find themselves in a position of inferiority.

Without an abundance of water in summer it is impossible to carry on the various processes necessitated by the progress of the milk industry: the use of the ice-machine, the pasteurization of whey etc., without good water would be impossible.

A deficiency of good drainage would cause pestilential odours very injurious to the dairy produce.

With a too extensive radius it is difficult, especially in summer, to collect supplies of milk from which choice butter can be obtained. Lastly,

It has been ascertained that the cost of labour and plant for 5,000 litres of milk will not be higher than that required for 2,000 litres.

The expense is therefore much less in proportion for 5,000 litres than for 2,000 litres. It may be added that many associations have neglected to profit by old water-mills, long unused, from which they might have derived a part of their motor force at small cost.

M. Rozeraÿ considers that proximity to a railway station, often regarded as most important, is less so than those conditions above-mentioned. In fact, butter is much less in volume than the milk required to produce it, and is easily conveyed to the nearest railway station.

To establish a co-operative dairy the founders, numbering from 60 to 500, meet together and advance the whole or part of the capital, generally at the rate of from 3 to 4 per cent; the shares are worth from 100 to 400 francs each, and are paid off every five years.

The sum required for the purchase of land and the erection of buildings and for plant, varies from 25,000 to 70,000 francs, according to the size of the factory.

The work has always been done on a small scale; the founders, either fearing to undertake too heavy a charge or not foreseeing the future importance of the dairy, have erected buildings which are too small, and procured plant which has had to be completed or replaced even before it is worn out.

In provisional meetings the rules are discussed and accepted. In an appendix will be found the model rules drawn up by M. Rozeraÿ with articles borrowed from those of Sainte-Quenne, Échiré, Irleau and Surgères.

Members admitted after the constitution of the society pay an entrance fee per cow in proportion to the assets of the society.

The sums required to pay off the debts of the society are raised by deducting a centime or half a centime per litre of milk sold.

§ 3. WORKING OF A CO-OPERATIVE DAIRY.

Every co-operative society is under the management of a Board of Management, consisting of a president, one or two vice-presidents, a treasurer, one or two secretaries, and delegates appointed from villages, in the proportion of one for every ten or twenty or fraction of twenty members.

The paid employees are the book-keeper, the manager of the butter-making and, in a large society, his assistant, the superintendent, the mechanician, and the collectors of milk. Some societies give their employees, besides their salaries, a percentage on the sales.

The accounts are kept by single entry, and the books used are those required by this method; day-book, ledger, cash books and inventory. There is besides a book in which are entered the monthly contributions of each member, the price per litre of milk, the sums raised and the amounts

deduced for paying off the loan contracted for the establishment of the dairy.

The milk collectors enter every day in a memorandum-book the quantity of milk received, and from this the book-keeper draws up a fortnightly or monthly statement.

Each member has a memorandum-book which is, so to speak, the duplicate of that in which the milk collectors enter the number of litres received with the dates. On the first pages of these books regulations in regard to milking and the preservation and delivery of the milk are to be found.

Each dairy has a register with vouchers for the retail trade.

We here give as a specimen, a page of the memorandum-book in use in the dairies of Sainte-Ouenne and of Mazières :

(1) -- *Sainte-Ouenne.*

1st. Fortnight		Number of Cows giving Milk	2nd. Fortnight		Number of Cows giving Milk
Dates	Milk litres		Dates	Milk litres	
1			16		
2			17		
3			18		
4			19		
5			20		
6			21		
7			22		
8			23		
9			24		
10			25		
11			26		
12			27		
13			28		
14			29		
15			30		
1st. Fortnight .					
2nd. Fortnight .					
Total					

at per litre

_____ Due

(2) — *Manières.*

1st. Ten Days			Recapitulation		
Dates	Quantity Supplied	Number of Cows	1st. Ten Days	2nd. Ten Days	3rd. Ten Days
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
			Total for the Month		
			at . . . per litre		
			Sum due		
			In payment of the sum due		
			for the above supplies		
			<i>Manières,</i> 191		

Members are paid monthly for the milk supplied by them. A few societies pay every fortnight. In practice payments are often made by the collector at the houses of those who supply him, according to a memorandum made by the book-keeper.

The price of a litre of milk is fixed by deducting the total cost from the total amount of the sales, and should the result be, for instance, 0 fr. 125; the fractions of centimes are devoted to the payment of the debt on the factory.

The buildings are constructed with simplicity and economy, generally looking towards the north or the east to ensure an even temperature, lower in summer. They are often on the side of a hill, so that the milk brought in cans may be at once poured into a gauged receptacle, whence it falls into a great basin that feeds the separators. This choice of a site has also the advantage of facilitating the outflow of the refuse water.

The plan of the building varies but little. There is 1st. a room for the motor; 2nd. a room for the separator, the churns, and the manipulation; here the butter is made into rolls; 3rd. a packing room; 4th. one or more cellars for the cream, easily ventilated and containing reservoirs or troughs of cement for water tepid in winter and iced in summer. If there is no room for meetings, they are held in the office, which in this case must be large.

Many societies have no more than a hot room for the machinery, a large room where the milk is kept, a cellar or cold room, and an office.

One or two of the employees lodge on the premises. There must be a table for the horses of the milk collector.

The plant varies little. The motor force is supplied by steam engines of from 8 to 15 horse power but having a generator powerful enough to produce the steam required for cleaning the utensils and warming the place in winter. Some dairies also for part of the year utilise their water power, thus diminishing the cost of the steam engine which by means of a hydraulic wheel can work at less pressure.

The milkmen, or collectors, are paid by the year or by the litre; or they have fixed salaries, and one centime per litre above a certain quantity. This post is contracted for at so much per year, per day or per litre. Long rounds are of course best paid. The horse or mule and the cart or other vehicle, in most societies, belong to the collector.

When the collectors have given up the milk they have brought, they proceed to clean their cans, which are first washed in hot water, then steamed and then rinsed in cold water. In practice, this work is done rapidly by means of a simple steriliser provided with a kind of chamber into which the pipes conveying steam and cold water are opened by means of a lever.

After this cleaning, by which fermentation is prevented, the cans are filled with whey to be sold the same evening to the various producers by the collectors, who must again wash the cans, on their return, in boiling water with crystals of soda, rinsing them in cold water before filling them with unskimmed milk.

The superintendent is paid by the month, receiving a bonus besides for every case of fraud he discovers. We may add that these cases are rare, because of the mutual control exercised by the members over one another. Members guilty of fraud are expelled without mercy from the societies and condemned by the Bureau and the General Meeting to fines fixed in the rules and usually in proportion to the number of cows possessed by the member. This is generally amicably arranged and few cases of fraud are brought before courts of law. Everything is done with the greatest prudence, and the taking of a sample of milk from the cattle-shed of the accused ensures against any mistake.

The separating is done every morning from seven o'clock till noon according to the dairy and the season. In winter the milk is first raised to a temperature of from 24 to 28 degrees by means of a heating apparatus in order to facilitate the separation of the globules of butter. In certain co-operative societies, for instance that of St. Christophe-sur-Roc, the milk, when taken out of the separator, is pasteurised, that is, raised by means of a heating apparatus or pasteuriser, to a temperature of 70 degrees, and then brought into contact with a current of water which lowers it to 14 degrees. It is then returned to the members without any mixture of buttermilk, in the proportion of $\frac{9}{10}$ ths. of the quantity supplied. But if it is returned to them on being taken from the separator they receive the full quantity supplied. The water in which the butter has been washed, often put away in another receptacle, is proportioned to the whey obtained, and supplies the deficiency resulting from the work and from the separation of the cream.

In many dairies where there are cream refrigerators, the cream on being taken out of the separator is raised without being disturbed, by a special

apparatus called a cream-raiser and poured into the refrigerator whence it falls through a pipe into a cellar and is there received in vessels containing on an average 40 or 50 litres—sometimes these cream vessels are arranged in tiers and the filling goes on without supervision—or the cooled cream passes into a special chamber where the temperature is so regulated as to obtain a uniform ripeness in 24 hours.

Thus in summer the cream receptacles are plunged into iced water, but in winter the temperature of the place is generally raised by means of pipes through which passes a current of steam. In a word, the ripening is so regulated as to produce in summer, at the time of churning, cream of from 55 to 60 degrees of acidity, raised in winter to 65 degrees; such ripening produces the best results as regards the quality of the butter.

In general 100 litres of milk produce 11 or 12 litres of cream; in summer 9 and 10%; in winter when the milk is rich the percentage rises sometimes to 13 %.

The day after separation, from seven to eleven o'clock in the morning the cream is churned for 30 or 40 minutes, then the butter is received in a trough and subjected to the butter worker. For the manipulation a wooden spatula is used.

The butter is made into rolls each weighing ten kilogrammes, wrapped in calico, and placed in an osier basket or between laths within which is a packing of straw and paper. The baskets are kept in a special place in winter, and in a cellar or cold chamber in summer. Every day by the trains between 3 and 8 p. m. the butter is forwarded to Paris. Some dairies keep back a quarter of their produce in order to send on market days—Wednesdays and Saturdays—a larger quantity to the central markets of Paris.

The packing costs on an average 0 fr. 35 per roll, thus :

	fr.
Basket	0.18
Straw	0.03
Paper	0.03
Calico	0.11
Total	0.35

Certain dairies send butter by parcel post packed in special baskets of better quality. The dairy of Surgères, for example, procures them from Périgueux; they cost from 18 to 28 centimes according to size.

For some tradesmen butter is prepared in rolls weighing 500 or 250 grammes each.

The dairies generally sell butter by retail at the same rate as that of the central markets of Paris the previous week, that is the price is fixed for a week, after deducting the cost, about 40 centimes per kilogramme.

The cost of carriage and sale at the Central Markets of Paris is in fact 40 francs per 100 kilogrammes. This includes carriage, carting, cooled storage, unloading, sale and commission. The butter is placed in refrigerator-trucks, with double partitions separated by layers of cork; in each is an iced receptacle and pipes to carry off the water outside; an employee receives the baskets at each station as they come from the dairies, and arranges them on shelves. He must remain in the train from the point of departure to the station nearest to the last society belonging to the Central Association, and there he closes the double doors and seals the truck.

We have said that the separated milk is returned to the members by most dairies. But there are some dairies in the south of the department of Deux-Sèvres which keep pigs to consume their by-products. The pigsties are very simple, being divided into boxes 20 metres square each of which may contain 10 to 15 animals, according to their size. From a passage in the middle the milk is distributed by means of a receptacle on wheels provided with an india-rubber tube.

As a rule all the animals are kept in one or two sties, to simplify the labour of taking charge of them; there would also be danger of epidemics unless special precautions were taken. The boxes enclosed by a partition about one metre in height communicate with an outer yard where the pigs may take the air. The whole building is well ventilated, and frequently sprinkled with antiseptics.

Pigs three or four months old are obtained from dealers and as soon as they arrive they are vaccinated against measles. Their diet is from 10 to 15 litres of milk per day; sometimes farinaceous substances and linseed oil are added. When three to six months have passed they are sold to dealers or sent to Paris. One man can take care of the 250 or 350 animals in one sty; he is lodged and paid 80 or 90 francs a month.

Some attempts at making cheese of poor quality were made in the dairies of the south of Deux-Sèvres but they were soon abandoned. In milk completely devoid of fatty substances it was necessary to introduce something fatty so that the cheese might not be too dry, linseed or cotton seed oil, etc. This might be done by means of the separator, but no butter factory would permit the use of anything which could give rise to a suspicion of its being mixed with the butter.

§ 4. RESULTS OBTAINED.

That we may have a full acquaintance with the results of the Co-operative societies of the Charentes and of Poitou we shall compare, (following the example of M. Pierre Dornic) the work done in 1913 with that done in 1914.

Between the first and the second of these years the number of associated dairies rose from 129 to 130, and that of their members from 77,765 to 80,188, an increase of 2,423.

The number of cows increased by 8,941, that is from 205,557 to 214,498, which gives 2.67 cows per member, instead of 2.64 in 1912 and 2.62 in 1911.

So it is evident that each member is a small farmer.

In 1913 the dairies treated 342,044,089 litres of milk, an advance of 6,000,000 litres on the quantity treated in 1912, which in its turn was 2,000,000 litres above the quantity treated in 1911.

But this increase was not general. For an increase of 4,500,000 in Charente-Inférieure and nearly 3,000,000 in Deux-Sèvres there was a diminution of 1,000,000 litres in La Vendée compensated for in Indre-et-Loire by an increase of 1,000,000 litres.

In Deux-Sèvres there are 26,044 members, and 70,192 cows, which produced 110,700,392 litres, i.e., a yearly produce of 1,577 litres per head.

In Charente-Inférieure with 23,545 members there are 59,918 cows producing 105,715,599 litres, that is 2.58 cows for each member, and 1,764 litres per cow. The last two departments yield about two-thirds of the total dairy produce.

La Vendée is much behind, having only 15 co-operative societies, 1,546 members and 30,599 cows. The total number of litres produced is 6,309,329, with an average of 2.64 cows per member, and an annual production of 1,644 litres per cow.

Charente-Inférieure and Deux-Sèvres contain respectively 49 and 43 co-operative societies, and, as the production is the greater in the last named department, it may be concluded that its dairies are of the greater importance. There is a marked disproportion in the number of cows and the annual produce of each, Charente-Inférieure having the advantage in these respects.

It is seen besides that in 1913 the produce per cow was above that of 1912 in Deux-Sèvres (1,577 litres instead of 1,546) but in Charente-Inférieure the figures for 1912 were 1,805 against 1,764 in 1913. This diminution may be attributed to the rather mediocre quality of the feeding.

In considering the dairies separately it will be seen that the smallest has only 106 members, while the largest has 1,300, and the numbers of cows are respectively 228 and 6,000.

In Charente-Inférieure the extremes are represented by 131 members with 285 cows, and 1,200 members with 3,300 cows. There is therefore an average of 2.17 cows for the smaller association, and of 2.75 cows for the larger so that the general average is 2.58 cows per member. The extreme figures in the case of the 49 dairies of the department are 1.2 (St-Hilaire de Villefranche) and 4.33 (St. Laurent-de-la Prée). In these dairies the annual product per cow was 1,618 litres in the first instance, and 1,832 litres in the second.

The comparison of the annual milk products is interesting. The average for the whole department is 1,764 litres, but it falls to 1,021, and to

1,054, in a considerable number of dairies in Saintonge, and goes up to 2,700 litres at Saint Jean de Liversoy, 2,493 at Surgères, 2,475 at Vérines and 2,379 at Cram-Chaban, etc.

Aunis is incontestably much in advance of Saintonge.

The milk production of the Deux-Sèvres has a peculiarity; for, though in quantity inferior to that of Aunis, it is much superior in richness of fatty substances. In this department, the 43 syndicated dairies show marked differences; the smallest has only 40 members with 200 cows, the largest 1,580 members with 4,500 cows; the average being 600 members and 1,630 cows to each dairy.

The dairy of Chef Boutonne has 1.6 cows per member (1,000 cows for 640 members) while that of Palluau has 5 and that of Moncoutant 4 (153 members, 743 cows).

In these three dairies the annual produce per cow was respectively 1,370 litres, 1,402 litres and 899 litres, the general average being thus 1,577 litres.

The department of La Vendée has no more than 15 co-operative dairies with an average of 746 members; the smallest has 120 members with 200 cows while that of Saint Michel-en-l'Herm has 2,249 with 4,850 cows giving an average of 2.16 cows to each member.

In this department each member possesses an average of 2.64 cows, the minimum being 2.16 (Saint Michel-en-l'Herm) and the maximum 3.83 (Sainte Radégonde-des-Noyers).

The annual quantity of milk is 2,405 litres at Damvix, going down to 1,335 litres (Sainte Hermine) and 1,378 (Oulmes). The general average, 1,644 litres is much below that of 1912, intermediate between that of Charente-Inférieure (1,764 litres) and that of Deux Sèvres (1,577 litres). The most important dairy in La Vendée (Mareuil) had received in the year 8,167,954 litres, and the smallest (Oulmes) only 399,909 litres, giving a daily average (Sundays excepted) of 27,000 litres for the first and of 1,330 for the second.

The department of Vienne has made rapid progress in dairying. Nine societies have already joined the Central Association, and one of these, at Dangé, is the most important of the Association, for it received 9,779,700 litres of milk in 1913. The smallest dairy has only 700 cows for 390 members; it was but lately established, so may develop in time. The total number of cows varies from 700 to 6,500, and the average per member from 1.11 to 5.00. The average annual quantity of milk varies between 905 and 995 litres (Roc-Saint-Louis and Archigny) and 1,692 litres (Agramont). This poor supply is accounted for by the fact that the farmers have only lately begun co-operation and the production of food-stuffs as well as of milk is not yet well regulated.

Indre-et-Loire merits special mention on account of the rapidity with which it devoted itself to dairy industry, and afterwards to the co-operative form. There are many co-operative societies here and all prospering, though their geographical position prevents many of them entering the Central Association. From the reports however of those that have joined we may have an idea of the condition of all. The smallest has 545 members with 2,641 cows, which gives an average of 4.84 cows to each member and a total

milk production of 4,460,413 litres, giving an average of 1,088 litres per cow. The dairy with the fewest cows (Bléré) produces 3,008,787 litres; it has 1,800 cows and 920 members, giving an average of 1.97 cows to each member. The co-operative dairy of Ligneil is the largest. In 1913 it received 9,109,795 litres of milk, an average of 1,622 litres per cow. At Orbigny, the quantity of milk received was only 1,082 litres, so that 1,573 litres was the general average of the milk received by the five dairies belonging to the Association.

Charente also has five co-operative dairies with from 645 to 1,600 members, and cows ranging in number from 3,600 (Baignes-Sainte-Radegonde) to 1,450 (Basleville-sur-Aigre). Thus the average of cows per member varies in this department from 1.75 (Sainte-Sévère) to 2.77 (Le Souterrain). We see that the milk supply is meagre, the dairy industry, and more especially that of the co-operative dairies, has not yet taken its due place. At Villefagnan the annual quantity of milk is only 907 litres per cow. At Sainte-Sévère the quantity is 1,194 litres, and at Baignes, where the dairy was established more than 20 years ago, it is 1,539 litres. The smallest of the co-operative dairies took in 1,384,526 litres and the largest (Baignes) 5,538,063 litres. The yield of butter is rather satisfactory: 20.82 litres to the kg. at Sainte-Sévère and 23.58 litres at Basleville with a general average of 21.61 litres.

In Indre-et-Loire the figures come closer together, the minimum being 21.38 litres (Bléré), the maximum 22.52 (Orbigny) and the general average 22.10 litres.

In Vienne the difference is more marked. The best yield is from the "Laiterie de la Mélusine" with 19.51 litres for a total milk production of 3,117,976 litres from 2,398 cows, being an annual production of 1,301 litres per cow. Civray comes next with 20.50 litres, followed closely by Gençay with 20.82 litres. The least satisfactory return is 20.68 and the average is 21.72, a figure nearly the same as that for 1912 which was 21.74.

In La Vendée the averages are: 21.26 for all the dairies, 20.69 for the best (Le Mazeau), 21.78 for the least prosperous (Maillezais). This is a difference of 1 litre for 15 dairies.

In Charente-Inférieure, the dairies showing returns less than 21 litres are: Montils-Colombiers, 20.09 litres; Pérignac 20.73; Nienuil-Saint-Georges 20.77; Belluire and La Ronde 20.98. Only one shows more than 24 litres (24.22) and its annual quantity is 2,343 litres per cow. Many show more than 23 litres, and the general average was 22.41 litres against 22.53 in 1912.

The dairies of Deux-Sèvres show a general average of 20.47 litres against 20.75 in 1912. The minimum is given by Soignon, 18.09; next come Saivres-Castarie (18.48) and Saint-Christophe-sur-Roc (18.55). The least satisfactory return of all—23.23 is from a dairy in the north of the department—the only one showing more than 23 litres. Of 43 dairies, the return from seven was from 22 to 23 litres, that from 12 from 21 to 22 litres, that from 16 between 20 and 21 litres, from 8 between 19 and 20; and finally that from 5 between 18 and 19 litres.

The 342,044,089 litres of milk, the total taken in by the united dairies of the Central Association, produced 15,917,765 kilogrammes of butter, i.e.

74 kg. per cow, or 21.48 litres to each kilogramme. This return is a little better than in 1912 (21.63) but the annual production of butter per cow is still insufficient.

In Deux-Sèvres, only one dairy surpasses the average of 100 kgs. per cow that of Magné, which showed 117 kgs. Next came Taizé with 100 kgs.; Saivre-Castarie and Prin-Deyrançon, each with 94 kgs. In the worst instance, we find 45 kgs. of butter per cow in the year.

In Charente-Inférieure, Saint-Jean-de-Liversay showed 127 kgs.; Vêrines 110 kgs.; Cram-Chaban 109; Sainte-Soulle and Bois-Hardy 107; Clavette 103 kgs.; La Ronde 102; Surgères 101. But in this department the numbers also go down very low even to 37, 46, 47 and 50 kgs. in dairies it is true, of small importance.

In La Vendée, only one dairy, that of Damvix, shows more than 100 kgs.; Le Langon shows 99 kgs. and Mazeau 95. But for one of the most important societies of this department we find only 62 kgs., and three others report no more than 70 kgs. annually per cow.

In Charente the best dairy reports 72 kgs. and 40 is the lowest reported.

In Vienne, Gençay leads with 81 kgs. while the lowest figure is scarcely 39 kgs.; another dairy shows only 41 kgs. The dairies of Indre-et-Loire are better; though one reports only 50 kgs., four report 72 to 79 kgs.

M. Dornic attributes the poor return in the first case to the fact of many of the farmers still feeding their cattle on oil-cake neglecting the selection of food recommended at butter competitions.

The total quantity of butter in 1913 was 15,917,165 kgs.; of this one third was made in Deux-Sèvres (5,402,800 kgs.) rather less in Charente-Inférieure (4,710,731 kgs.); in La Vendée only 2,366,115 kgs. and the rest in the other departments.

By examination of the net amount of sales we find that the highest prices in Deux-Sèvres per 100 kgs. were — Sainte-Castarie 330 frs. and the same at La Crèche; — Vouillé 328 frs., Fehiré 325 frs., Saint Varent the same. The lowest were 277 frs., 282 frs. and 286 frs., the average is 304 frs.

In Charente-Inférieure the highest prices were obtained at Saint-Hilaire, 320 frs.; Matha, 313 frs., Surgères, 305 frs.; the lowest were 274 frs. and 282 frs. and the general average 292 frs. which is 12 frs. less than that of Deux-Sèvres, but higher by 1 franc than the average for 1912 for the same department.

In La Vendée the average price is 291 frs., which is 5 frs. higher than that of 1912; but among the dairies the price varies from 298 frs. (Sainte-Hermine) to 271 frs. and 275 frs.

In Vienne there is but little difference in the prices, except that one or two are respectively 289 frs. and 296 frs. The others vary from 300 frs. to 310 (Gençay) and 311 (Chauvigny).

In Charente the prices were from 292 to 300 frs. except in one instance of 277 frs.

In Indre-et-Loire the average price was 299 frs., being an advance of

2 frs. on that of 1912. At Reignac and Bléré the prices were respectively 307 and 306 frs. The lowest was 290 frs.

For the average of the total production we find 297 frs., one franc less than that of 1912. The highest price was obtained in Deux-Sèvres (304 frs.) and the lowest (289 frs.) in the departments of Loire-Inférieure, Maine-et-Loire and Indre.

The total net sum realised by the sale of butter was 47,300,445 frs. If we add to this the value of the skimmed milk, at 2.50 frs. per hectolitre, there would be paid for 3,420,440 hectolitres the sum of 8,551,100 frs., therefore the total receipts were 55,851,545 frs. This is an income of 260 frs. per cow, not counting the value of her calf, and a gross price of 16.32 frs. per hectolitre of milk.

The general expenses may be calculated at 5,930,158 frs., making the price 1.70 fr. per hectolitre, representing 10.62 % of the receipts.

In every department there are great differences, and these are not less than those we find in comparing one department with another. In Charente-Inférieure the general expenses per litre are 1.4 centimes, in Deux-Sèvres 1.6 c., in La Vendée 1.7 c., in Charente and Vienne 2.3 c., in Indre-et-Loire 2.4 c. and in the other departments 2.6 c. The lowest figure is 0.6 c. per litre at Chaillé and St-Martin de la Coudre (Charente-Inférieure) and at Saint-Hilaire-la-Palud (Deux-Sèvres). The highest figure is shown by a dairy of Vienne, it is 11 times higher than the preceding figure and is 6.6 c. per litre. Thus in the prices of milk, there is a difference of 6 centimes per litre, due to the expense of collection and labour.

Even in a single department, there are many differences.

Charente-Inférieure possesses dairies in which the general expenses amount to 2 or 3 centimes per litre, in one to 3.4 centimes, and in another to 2.6. In 49 dairies 6 pay 2 centimes and in 7 the expenses are less than 1 centime per litre.

So, also, in 43 dairies of Deux-Sèvres 6 do not pay 1 centime per litre, yet there is another which pays 4 centimes and another even 3, and 5 and 7 pay 2 and 3 centimes respectively.

La Vendée has only one dairy in which the working expenses rise above 3 centimes (3.3); in another they are only 2 centimes. In one alone (Maillezais) they do not reach even a centime (0.98) and the general expenses are 0.31 % of the receipts.

In Charente, in one dairy (Sainte Severe), the figure falls to 1.5 c., and is nearly as low in Le Souterrain (1.6) but the other three societies pay 2.3, 2.4 and 2.9 centimes per litre.

In Vienne, the dairy of Dangé leads with 1.3 per litre. All the others show above 2 and 4 (out of 9) even 3 centimes per litre. In Indre-et-Loire the differences are even greater; one society (Ligueil) paying 2.1 per litre, while 4 others pay 2.4 and 3 centimes.

Considered in regard to the total receipts, the general expenses are 3.62 % at Epannes, and 3.69 % at Saint Hilaire-la-Palud (Deux-Sèvres) rising to the enormous figures of 40.7 % in one dairy of Vienne, 20 % in

one of Indre and in another of Maine-et-Loire, and, lastly, to 26 % in one society of Deux-Sèvres.

These figures suggesting some defects the good faith of the managers do not hide must not make us overlook the general conditions, which are most prosperous. The district where co-operative societies were established twenty-five years ago and which later was threatened with poverty and destitution has now recovered owing to the Association. Milk and its products, which formerly gave but insignificant profit except in the neighbourhood of the thinly populated cities of the district, now yield the farmers a good harvest of "liquid silver". Herds of dairy cattle have increased, manure is more abundant and consequently the soil is more fertile. To ensure sufficient feeding, the ground had to be better cultivated and therefore it is now more productive. For all these reasons, the welfare is general and emigration to the cities has completely ceased.

APPENDIX.

RULES OF THE CO-OPERATIVE DAIRIES.

1 — *Aim and Organisation of the Societies.*

Art. 1. — Among the agriculturists of X — and the neighbouring communes an association has been formed under the title of

Art. 2. — The object of this association is to manufacture butter in common so as to obtain higher prices. It authorises retail trade in its own neighbourhood. Every member must send to the Society all the milk of his farm except what is required for his household, and by so doing engages himself not to make butter for sale.

If milk be sold it must be through vouchers given in the name and by the authority of the Society.

Art. 3. — The offices of the Society are at the dairy. A general meeting convoked by the president is held in January every year. At this meeting the Bureau gives an account of the work of the year and of the financial condition of the Society.

An extraordinary general meeting may be convoked, if required, by one-third of the members.

In every case half the number of members constitutes a quorum; should the number be less than half a new meeting must be held within a week from that time, at which, whatever be the number present, the questions on the agenda must be considered.

Art. 4. — All political or religious discussion is strictly prohibited. Every member who criticises openly without sufficient reason the decisions of the Board, and who by words or otherwise seeks to interfere with the

working of the Society shall be liable to a fine of from five to one hundred francs, and for a second offence he may be excluded from the Board of Management.

Art. 5. — The duration of the Society is fixed at six years.

The number of members is unlimited. A month after the definite formation of the Society, members will be accepted by the Board of Management, and must pay an entrance fee in proportion to the number of cows they possess. The amount of the fee will be fixed every month by the Board of Management which has the power, when judged desirable, to close the list of members.

Art. 6. — Where owing to the distance from the offices of the Society or difficulty of communication the collection of milk would only occasion a loss to the Society, the Board of Management shall arrange with the member some means of facilitating communication.

Art. 7. — All engagements terminate on both sides with the death of a member or his leaving the district. But in case of decease the widow or the heirs may continue to be members of the Society. In the case of leaving the district because of the termination of a lease or other cause beyond his control, the member may pass on his rights to his successor, by mutual consent.

II. — *Exchange of Members.*

Art. 8. — Every one who has been a member of any co-operative dairy will be admitted to another without entrance fee if reciprocity is admitted and if the Board agrees.

Should a member go to settle in a place where there is no dairy or if free admission to the local dairy should be refused him, the Board must consider whether it would be desirable to grant him compensation, and, should the decision be affirmative, it must fix the amount.

Any member whose change of domicile would create difficulties for the Society in regard to the collection of milk may be excluded by decision of the Board of Management, and awarded compensation.

III. — *Cows allowed to Supply Milk.*

Art. 9. — The Society will only receive the milk of cows of local breeds.

But if circumstances should make it desirable to import cows of other breeds, the Society meeting in general assembly on the request of 50 members may grant permission to do so. In this case the assembly must decide as to the breeds to be imported.

IV. *Minimum of Butter in Milk.*

Art. 10. -- A minimum of butter in the milk of every cow, must be fixed. The owners of cows of which the average milk, during the period of lactation falls short of this minimum, will be advised to part with them.

The Board will judge as to when and how the decision is to be carried out.

Frauds with regard to Milk Sampling.

Art. 11. -- Any member convicted of fraud with regard to milk either by adding water, by skimming, or in any other way, shall be liable to a fine of from 100 to 1,000 francs to the Society as compensation for damage. The amount will be proposed by the Bureau and fixed by the Board. A sentence to the payment of such compensation will involve the expulsion of the defaulter. The Bureau is authorised to take samples or have them taken from any member at any time and at any hour of the day.

A special employee appointed by the Bureau will take three samples in the presence of the member, his partner or a person appointed to give the milk to the carrier of the Society, or in default of these, before two witnesses, who will certify by tickets attached to the bottles containing the samples that it was done regularly in their presence.

These bottles must be closed with wax and bear the impression of the seal of the Society; one will be given to the member or his representative, the second will be sent to the town-hall of X— and the third will be retained by an agent of the Society to be analysed.

The member may if he chooses write his signature on a piece of gummed paper and attach it to the seal of each bottle.

The same evening or the following morning, after the milking of the cows, three more samples must be taken in the presence of the agent of the Society on the one hand, and of the member or his representative and two witnesses on the other. These samples must be sealed, ticketed, and disposed of like the first, and also analysed.

When samples are taken there must be an official report, of which two copies must be made within 24 hours by the superintendent of the Society. The member from whom the samples have been taken must sign the report, of which he will receive a copy.

Should the analysis show that the member from whom the samples were taken, has defrauded the Society, he will have to pay the fine indicated in the first paragraph of this Article.

VI. — *Cases of Expulsion.*

Art. 12. — A member may be expelled in the following cases and according to the following forms :

1st. If he has undergone any penal sentence for fraud or theft ;

2nd. If he has not fulfilled his obligations towards the Society ; if he has defrauded it or endeavoured to injure it by words or deeds likely to interfere with its working.

A member presumed to be guilty is summoned by registered letter to appear before the Board, that his defence may be heard. Should he fail to appear the sentence of expulsion is proposed by the Board, and ratified by the General Meeting, after hearing the report of the Board giving the facts and explanations. The voting takes place by ballot without any discussion, and the vote of majority of the members present is decisive.

VII. — *Management.*

Art. 13. — The Society is managed by a Board of Management which may be renewed every year, but its members are eligible for re-election. It is composed of a Bureau of six members, and of at least one delegate for each town or village within its district.

A village from which more than 20 members come may send a delegate for every 20 members, or fraction of 20.

Art. 14. — The bureau consists of a president, two vice-presidents a treasurer, and two secretaries.

All the members of the bureau are appointed by the General Meeting of members, by ballot and, by a majority of the members voting.

The delegates are elected respectively by the members belonging to their village, isolated houses being included in the nearest village.

Art. 15. — The Board of Management undertakes everything connected with the working of the Society, supervises the carrying out of all its regulations, and verifies and sanctions all its transactions.

It meets once a month, being convoked by the president.

Art. 16. — The bureau meets whenever the president judges it necessary. It manages current affairs, prepares the monthly accounts and decides questions that cannot be delayed till the next session of the Board of Management.

The members of the bureau supervise all the paid employees.

VIII. — *Resignations.*

Art. 17. — Members of the Board of Management on resignation or death must be provisionally replaced within fifteen days by the Board

itself which must decide whether to call upon the General Meeting or a meeting of the village to make a permanent arrangement. Members who have resigned will retain their posts till they are replaced.

IX. -- Powers of the *Members of the Bureau.*

Art. 18. -- The president must see that the decisions of the Bureau or the Board of Management are carried out, and must represent the Society in its relations with outsiders or with public authorities. He makes purchases, concludes contracts, signs correspondence, invoices and cheques. He is responsible to the Board of Management, and must lay before it all necessary documents. He maintains order in the meetings over which he presides, and keeps the speakers to their subject.

The vice-presidents assist the president in the performance of his duties, and take his place when he is absent.

The treasurer takes charge of all the money in the bank, and is responsible for its safety. He must give account of it when required, and at least once a year to the General Meeting.

The secretaries must draw up reports of the General Meetings, of the meetings of the Board of Management and of the bureau. They copy these reports in a special register kept by themselves, which must be at the disposal of members who wish to consult it.

Every report, when read and adopted, must be signed in the register by the president and by the secretary by whom it was drawn up.

Art. 19. -- All the administrative functions of the Society are entirely gratuitous.

The members of the Board must ensure the regular and exact collection of the milk which must be of good quality and they must prevent frauds.

The Board of Management may, if desirable, appoint a paid overseer to exercise this supervision.

In case of fraud, irregularity or inaccuracy, the delegates and overseer must ascertain the facts and inform the president immediately that he may take measures accordingly.

X. -- *Management of the Dairy.*

Art. 20. -- The management of the dairy is entrusted to a paid employee. He is manager and book-keeper; he directs the work of the dairy, gives orders to the staff, sees that internal and external regulations are carried out and keeps a full and regular account of all the transactions of the Society, as representative of and under the supervision and instructions of the President.

He must also collect debts and without delay place the amount in the hands of the treasurer in return for a receipt. At the end of every month

the treasurer, by direction of the president, hands him the funds necessary to pay the members.

Art. 21. — No action at law shall be taken without the consent of the Board of Management, which will, if necessary, give full powers to the president.

The members of the Board incur no personal obligation from their position; they are responsible only to their electors.

XI. — *Loans.*

Art. 22. — For the purchase of material and accessories, and the cost of the buildings required for the dairy a loan must be contracted.

The Board of Management must arrange this loan, and fix the amount, the conditions and the terms of repayment.

All the members are jointly and severally responsible for repayment of the loan.

XII. — *Budget.*

Art. 23. — At the end of every month the bureau will fix the deduction to be made on the price of every litre of milk to pay the yearly debts, and the cost of the establishment of the dairy.

The surplus will be divided among the members in proportion to the quantity of milk supplied by them.

XIII. — *Dissolution and Liquidation.*

Art. 24. — The dissolution of the Society cannot be decided on before five years have expired unless, in the General Meeting, such dissolution be demanded by three fourths of the members. In this case, every member will share in the profits and losses of the Society in proportion to the quantity of milk he has supplied.

At the end of five years, if a three fourths majority desire to continue for another period to be fixed, every member will be free to withdraw, leaving to the Society his share of the profits. Should the contrary be the case, liquidation must take place as above.

XIV. — *Care of Milk.*

Art. 25. — Milk requires close attention especially in summer, that it may be delivered in good condition. Every member must conform to the following regulations:

Immediately after milking the milk must be poured into a pail, tinned inside and kept very clean.

Each milking must be kept separate, and if not quite cooled must be taken in this condition to the milkman's cart.

The milk must be kept in a cool place and protected from every odour.

After a cow has calved, the milk must not be put into the dairy till the fifth day.

Special regulations, enforced by fines, may be made by the Board of Management for cases not contemplated in the rules of the Society.

Such regulations must be made known to all the members by means of placards attached to the carts of the milkmen.

XV. -- *Registration of Members. Contract.*

Art. 26. -- Every member shall sign the register of members and shall receive a copy of his agreement.

The present regulations have been drawn up at the General Meeting on the... by all the members present.

They must be printed in the form of a pamphlet and given to every member on his entrance into the Society.

XVI. -- *Insurance of Animals.*

Art. 27. -- A commission of experts shall be appointed in the proportion of three members per section.

The election will be conducted in the same way as that for the Board of Management: the commission composed of fifteen members will appoint a president and two vice-presidents; the president will be summoned whenever the Board meets; he will have right to speak but not to vote; the commission must value the animals insured both in sound and unsound condition, when requested by the members.

The experts will perform their functions in their section; the insurer has a right to appoint another expert chosen by him from among the members of the commission.

Members will have no right to make complaints or take proceedings after the valuation by the experts. Members who wish to insure must enter all their animals in classes, cows, heifers and calves, otherwise the insurance will be null; the insurer must call in experts to examine the animals he wishes to report; members surrendering or resuming insurance are under the same obligation.

Members surrendering must give notice for the end of the month in course, and may not resume insurance until a year has passed from date of surrender.

Heifers may be insured as soon as they are weaned, and for them half-price must be paid up to the 29th. September of the following year, when the full cost must be paid.

Other calves may also be insured from the day they are weaned; half-price must be paid for them till the 29th. September of the following year, from which time the full cost must be paid till the 15th. May following, and from that time they cease to be insured.

Members will receive 80 % of the estimated value of animals insured when lost by natural death or accident.

No compensation will be given should the loss of the animal be due to want of care, imprudence, ill treatment, fire or lightning.

The value of the animal will be paid by all the members in proportion to the number of animals insured by each.

Losses must be notified at once to the experts of the section, unless he is more nearly related to the insurer than the fourth degree, when experts of another section must be called in.

The decision must be immediately submitted to the president of the society, who will order the treasurer to pay the amount of the insurance within fifteen days after verification of the loss.

In every section the members must appoint one of their number to whom the insurers must make their declaration in case of purchase or sale, or for a new registration.

Every insurer must keep a book in which to enter the number of animals he has insured; whenever a change is to be made he is obliged to present himself to the expert of the section appointed.

The insurer, who, not supplying milk, shall forget to pay his share for his losses, will be warned; should he neglect payment for two months he will cease to be insured.

Insurance will not be compulsory.

GREAT BRITAIN AND IRELAND.

AGRICULTURAL CO-OPERATION IN IRELAND, 1912 AND 1913.

SOURCES:

REPORTS OF THE IRISH AGRICULTURAL ORGANISATION SOCIETY for the Years ended 30th June 1912, 1913, and 1914. Dublin, 1913, 1914, and 1915. The Sackville Press.
THE IRISH HOMESTEAD, Dublin.

§ 1. GENERAL PROGRESS.

If we judge of the progress of agricultural co-operation in Ireland by the number of new societies formed, the years 1912 and 1913 represent respectively the low-water mark of progress and the beginning of a renewed activity. In 1912 only 22 new societies were formed; in 1913 the number increased to 43.

This change corresponds to a change in the resources at the disposal of the Irish Agricultural Organisation Society, the central body by which agricultural co-operation is promoted. After having enjoyed from 1900 to 1908 a considerable grant from the Department of Agriculture and Technical Instruction for Ireland, the Society found itself reduced in 1909, by the withdrawal of the Department's grant, to the affiliation fees of affiliated societies, the subscriptions of individual members and a small grant from the Congested Districts Board. To these sources of income it was confined until 1913, when it received from the Development Commissioners a retrospective grant of £2,000 in respect of its work during the twelve months ended July 1st., 1912. A further grant of £1,500 was made in respect of the nine months ending 31st. March, 1913, and a grant, not exceeding £4,000, was sanctioned in respect of the year ending 31st. March, 1914, on the basis of £1 from the Development Fund for each £1 received from affiliation fees and subscriptions.

If, on the other hand, we consider the increase in the business done by the existing societies as the test of progress, both years showed a considerable advance. Indeed, if we take the aggregate turn-over as given in the statistics published by the Irish Agricultural Organisation Society, the advance would appear to have been considerably greater in 1912 than in 1913. According to these statistics the total sales increased from £2,666,483 in 1911 to £3,205,189 in 1912 and £3,333,189 in 1913.

The statistics are open to criticism owing to the number of societies which fail to furnish returns of business done and to the fact that the proportion of such societies was greater in 1913 than in 1912 or 1911. An analysis of the figures shows, however, that the impression they convey is probably correct.

The statistics which are most nearly complete are those of the co-operative creameries and not only do they form the most numerous class, but their average turn-over is far greater than that of any other class of society, except the federations, of which there are only two. The creameries furnishing returns numbered 273 in 1911; 281 in 1912 and 285 in 1913. The total sales by these societies were £2,056,677 in 1911; £2,464,228 in 1912; and £2,524,621 in 1913. The average sales per creamery were, therefore, £7,533 in 1911; £8,057 in 1912 and £8,156 in 1913. Both total and average sales show a much greater advance in 1912 than in 1913.

The sales of the creameries form so large a proportion (about five-sixths) of the aggregate sales of all the societies that only very violent fluctuations in the turn-over of the other classes of society could make the general result differ from the result for this class alone. Hence we may take it that complete statistics would confirm the result indicated by the admittedly imperfect figures presented by the Irish Agricultural Organisation Society, and that the increase in sales was substantially greater in 1912 than in 1913.

We shall now give a summary of the statistics of agricultural co-operative societies for the years 1911, 1912 and 1913 and shall afterwards examine separately the progress in the principal classes of society.

TABLE I.—*Summary of Statistics for 1911, 1912 and 1913 of Agricultural Co-operative Societies in Ireland*

	Number of Societies		Membership		Paid-up Share Capital		Loan Capital		Turn-over	
	1911	1912	1911	1912	1911	1912	1911	1912	1911	1912
Co-operative Creameries	326	329	341	45,675	46,056	45,106	146,370	148,586	114,470	130,045
Auxiliary Creameries (not separately registered)	87	87	89	—	—	—	—	—	—	—
Agricultural Trading Societies	171	175	193	18,328	18,846	19,670	6,854	6,071	10,221	40,722
Agricultural Credit Societies	236	234	235	19,595	20,044	20,211	—	—	56,554	62,266
Poultry Societies	18	18	18	6,876	5,277	5,294	24,27	1,467	1,624	3,051
Home Industries Societies	20	19	18	1,375	1,326	1,212	766	1,025	1,014	283
Flax Societies	9	9	10	621	329	406	550	573	838	471
Pig and Cattle Supply Societies	40	49	52	657	1,533	1,230	24	—	30	—
Miscellaneous Societies	25	27	40	4,028	8,308	9,492	15,737	21,461	25,349	7,847
Federations	2	2	2	249	262	281	8,317	9,840	19,013	16,939
All Societies	934	985	985	97,318	101,991	104,702	180,885	188,323	201,007	240,050
									252,960	2,666,483
									3,205,189	3,331,189

§ 2. CO-OPERATIVE CREAMERIES.

The following Table shows the progress of the Irish Co-operative Creameries:

TABLE II. — *Statistics of Co-operative Creameries.*

	1911	1912	1913
Number of Societies	326	329	341
Number of auxiliaries not separately registered	87	87	89
Membership:			
No. of Societies furnishing returns of membership	301	303	309
Total membership of these Societies	45,725	46,956	46,106
Average membership per Society	151	154	149
Paid-up share capital:			
No. of Societies furnishing returns of paid-up share capital	295	298	314
Total paid-up share capital of these Societies £	146,370	148,086	152,476
Average paid-up share capital per Society £	496	496	485
Loan capital £	114,217	120,095	128,200
Sales:			
No. of Societies furnishing returns	273	281	285
Sales by these Societies:			
(a) Dairy Produce £	1,926,963	2,286,190	2,347,091
(b) Other Sales	129,704	178,938	177,530
Total Sales £	2,056,667	2,464,228	2,524,621
Average Sales per Society £	7,533	8,057	8,156

These figures show that while the number of societies increased but slowly and the membership and paid-up capital fluctuated but slightly there was (as we have already noted) a considerable increase in the sales between 1911 and 1912 and a further slight increase in 1913.

For 1913 the statistics are somewhat fuller and we have the following additional total figures: Nett profit, £28,383; nett loss, £5,763; reserve fund, £167,543; gallons of milk received, 90,960,805; pounds of butter made, 37,975,561. The average number of gallons of milk required to make a pound of butter varied from 2.65 to 2.07 the distinction of attaining the best result resting with the Cairncastle Co-operative Dairy Society in Co. Antrim. The average price paid to members for milk varied from 3.45 pence per gallon to 5.61 pence per gallon, the maximum being paid by another Co. Antrim society, that of Glarryford. The average price received for butter varied from 10.31 pence per pound to 13.39 pence per pound; the latter figure was reached by the Carrickmore Co-operative Dairy Society in Co. Tyrone.

In its Report for 1912-13, the Irish Agricultural Organisation Society expressed the opinion that the system of auxiliary societies not separately registered is unsound. It is found, we are told, that such societies have no incentive to make their business self-supporting. Means were suggested whereby such auxiliary societies may be constituted as independent societies, but it does not appear that by the end of 1913 much had been done in this direction.

The importance of grading up the average milk yield of cows in Ireland, to which previous Reports had called attention, is again insisted upon in the Report for 1912-13. It is stated that careful inquiries made at creameries all over Ireland have elicited the fact that the average yield per cow is only from 350 to 400 gallons, and that in the Province of Connaught it is probably 100 gallons less. Moreover the tendency seems to be for the average to diminish rather than to increase. To remedy this state of affairs it is urged that a cow-testing association should be formed in connection with every co-operative creamery. As illustrating the practical value of milk records the Report mentions two farmers who, through joining cow-testing associations, ascertained that there was an extraordinary difference in the returns obtained from individual cows. In the one case the highest return was £19 and the lowest £10; in the other the highest and lowest returns were £12 and £5. It is estimated that if the average return per cow could be raised to £15 the value of the output of the co-operative creameries would be doubled.

The question of winter dairying is also discussed in the 1912-13 Report and it is admitted that the attempts made to stimulate winter milk production had been a dismal failure. The Report deprecates any system of winter dairying which depends for its success on cows which have been graded up to produce an abnormal quantity of milk or upon feeding the cows on crops grown by costly processes of tillage and on bought food-stuffs. "Unless the winter feeding can be wholly, or at all events mainly, produced economically on the farm," says the Report, "winter dairying in Ireland must be abandoned altogether." The Irish Agricultural Organisation Society has appointed, as instructor in the winter production of fodder crops, Mr. Thomas Wibberley, well-known as the initiator and advocate of a system of continuous cropping. His services are placed at the disposal

creameries desiring to make an experiment in winter milk-production. The proposals put forward by Mr. Wibberley are :

- (1) Cultivated land should be bearing suitable crops all the year round ;
- (2) Tillage should be done at seasons when climatic conditions are favourable ;
- (3) The crops grown must provide a " balanced ration " for milch cows ;
- (4) They must be produced at a minimum of cost having regard to the scarcity and expense of labour.

It is claimed for this system, which has already been tried with conspicuous success in many parts of Ireland, that not only can the existing stock of cattle be properly fed during winter, but that a far greater head of cattle can be kept than at present, and that, all the crops being consumed on the land, the soil itself is enriched.

The same question is touched upon in the Report for 1913-14, in which it is stated that " a mass of evidence has been accumulated which goes to show that at least a *prima facie* case has been made for continuous cropping as against the established system of the rotation of crops. "

This Report complains that the question of marketing the butter produced by the creameries still remains unsolved. Under the present system the creameries compete with one another and prices are " cut. " The Irish Co-operative Agency Society still handles only a fraction of the butter produced. In 1913 its sales amounted to £ 163,813 whereas the aggregate turn-over of the creameries was £ 2,523,621.

§ 3. AGRICULTURAL SOCIETIES.

Turning now to the agricultural societies, the principal business of which is the joint purchase of agricultural requirements, we obtain from the Reports of the Irish Agricultural Organisation Society the following statistics :

TABLE IV. — *Statistics of Co-operative Credit Societies.*

	1911	1912	1913
Number of registered societies	236	234	235
Membership:			
Number of societies furnishing returns of membership	203	204	204
Total membership of these societies	19,595	20,044	20,211
Average membership per society	96	98	99
Loan capital	£ 29,264	31,738	26,598
Deposit	£ 27,290	39,467	28,685
Total capital	£ 56,554	62,206	55,283
Loans granted:			
Number of societies furnishing returns of loans granted	163	160	146
Total amount of loans granted	£ 56,955	58,244	55,492
Average amount per society of loans granted	£ 343	350	380
Number of loans granted	7,967	8,522	7,908
Loans outstanding at 31st. December	£ 52,588	59,599	54,938
Expenses	£ 607	738	728
Nett profit for year	£ 466	532	466
Nett loss for year	£ 33	67	51
Reserve Fund	£ 3,686	4,492	4,493

During the years under review the Irish Agricultural Organisation Society virtually suspended the promotion of co-operative credit in Ireland as the question was being investigated by the Departmental Committee to which we have alluded above. There is, however, evidence of growth in the existing societies. The increase of the deposits in 1913 is noteworthy. The figures for 1913 seem to show a decrease in the amount of deposits but this is probably due to the imperfection of the statistics, which are much more incomplete in 1913 than in 1912.

A central credit institution was registered in 1913 under the title of the Central Co-operative Credit Society, but its business has been very small as yet.

§ 5. OTHER SOCIETIES.

In the other classes of society, little progress is to be noted, except in regard to the co-operative bacon factories. The turn-over of the Roscrea

Bacon Factory increased from £47,355 in 1911 to £55,547 in 1912, but showed a slight falling off in 1913, being £55,400 in that year. Its business was greatly interfered with by an outbreak of foot and mouth disease in 1913.

The Wexford Meat Supply and Bacon Curing Factory, which started business by the sale of meat, has now commenced bacon-curing. The combined sales of meat and bacon were £34,256 in 1912 and £67,205 in 1913.

Besides these two societies which cure bacon on a large scale, there are several others by which bacon is cured in a small way for local consumption. The aim of these societies is to substitute home-cured bacon for the inferior imported article, and to provide a convenient local market for their members' pigs.

Of the two trading federations, the Irish Co-operative Agency Society seems unable to progress; its sales were even slightly less in 1913 than in 1912. The Irish Agricultural Wholesale Society, on the other hand, shows marked progress; its sales increased from £132,929 in 1911 to £176,000 in 1912 and £223,785 in 1913.

* * *

We have seen that the progress during the years under review has been of the nature of gradual growth of existing societies, rather than increase in the number of societies or developments in new directions. It is probable that, as a result of the increased funds at its disposal, future Reports of the Irish Agricultural Organisation Society will indicate that a more active policy has been pursued. The outbreak of the European War, moreover, has brought about a marked change in the position of the Irish farmer and new problems have arisen (such as the necessity for increasing the cultivation of wheat) in the solution of which co-operation will be able to play an important part.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

AUSTRALIA.

QUEENSLAND CO-OPERATIVE SUGAR WORKS ACT OF 1914. — The Act of which we summarise below the chief provisions came into force on January 1st, 1915. It provides in detail for the organisation of co-operative sugar works in Queensland with the help of loans from the Treasury.

Only owners or occupiers of a certain quantity of land suitable for the growth of sugar cane and of a quality to produce adequate crops of cane may make application to establish co-operative sugar works. The application must be accompanied by an instrument giving full particulars as to the situation and the area of cane land held, so that the possible output may be ascertained, and also by an engagement on the part of the applicants to subscribe to the capital stock of the company a sum equal to one-third of the capital required for the construction, equipment or purchase of the sugar works. There must also be presented with the application a map or plan of the locality showing the proposed mill site and a note showing the means and conditions for the transport of produce, as well as a copy of the articles of association. The latter must provide that no dividend at a greater rate than 5 % shall, at any time after the advances by the Treasurer have been repaid, be declared or paid or credited by the company and no person shall be qualified to hold shares in the company unless he is and remains a grower of cane under a cane-growing agreement in respect of a minimum area of land. The application must further be accompanied by deposit of such a sum of money as the Treasurer considers sufficient to defray the expenses incurred by him in connection with the report upon the application. The Treasurer shall submit the application to a competent commission of valuers and their decision shall be made known to the parties concerned by means of a notice in the Government Gazette.

The conditions necessary for the formation of a company are: that the subscribed capital shall be equal to the cost of construction or of purchase of the sugar works; that the value of the shares allotted to each member may not exceed the value of his land, and that the shares corresponding cannot be sold to guarantee the Government advance for the work

to be carried out. The law makes suitable provision for the supervision and inspection of the work of construction as well as for the management of the business.

The company shall have power to grow cane on any land whatsoever; it may purchase or rent from other persons land for the construction of roads and installation of means of transport. It may further make advances to the owners or occupiers of land on the security of the cane being grown by them.

As soon as may be after the completion of the works, the corporation shall, by a certificate published in the Government Gazette, declare what is the total capital sum expended, including interest at the rate of 4 %. If the capital cost exceeds the estimated cost, the share capital of the company must be increased in proportion.

The loan from the Treasury, equal to two-thirds of the cost, bears interest at 4 % and must be repaid within 21 years, the repayment of the principal beginning with the third year after the grant is made. If the profits of the sugar works are not sufficient to provide for the annual repayment of principal and interest, the original shareholders shall be liable to make good to the Treasurer the amount of the deficiency, by means of a rate in proportion to the land held by each. At intervals of seven years, the corporation shall, by certificate published in the Government Gazette, declare in respect of every shareholder, the amount of his share credit.

For each sugar works there may be constituted a board of advice, consisting of 5 members, three of whom shall be appointed by the Government, and two elected by the shareholders.

When the debt has been repaid, the Treasurer shall publish a certificate to that effect in the "Gazette", and the liability of the lands of the original shareholders to be rated shall cease.

(Summarised from the *Australian Sugar Journal*, of January 7th., 1915).

SPAIN.

WORKS OF THE ZARAGOZA FARMERS' ASSOCIATION. - This Association is one of the institutions created in virtue of the law of 1887 on associations and has consequently benefited by the provisions of the law of 1906 on agricultural syndicates. It was formed in 1900 with 853 members. It has now 3,259, principally inhabitants of the provinces of Zaragoza, Huesca, Teruel and Navarre; some of the members are other societies. Up to 1914, the Association provided for the working of the following departments; supply of manure and seeds; agricultural laboratory; credit bank. This year it has further founded a savings bank. Before showing the progress made in each of these departments in the last year, it will be well briefly to speak of their organization

The method pursued by the association in purchasing and supplying raw material for manure is as follows. The Board of Management orders the materials *immediately from the factories* in proportion to the requirements of the members, without, however, the latter being bound in any way. The price of sale is the price paid by the association increased by the cost of carriage and administration, an allowance for waste and a small profit. The manure once received, samples are taken for the laboratory to determine their chemical composition.

The agricultural laboratory, founded in 1904, is occupied principally with analysis of soils, manures, alcohol, wine and oil, the examination and germination of seeds, plant diseases, and advice requested in regard to the improvement of crops. All services are gratuitous for members. In 1915, more than 900 questions were answered.

The credit bank, founded in 1902 with a capital of 12,500 pesetas in 500 shares of 25 pesetas each, only grants loans to members and almost exclusively on personal security, two signatures being required by the Board of Management. The maximum amount of the loans is 250 pesetas and the minimum 50 pesetas. The rate of interest fixed by the Bank for its loans is 4 % per ann. In the course of the present year (1915), the association inaugurated the savings bank service. On the deposits 3%, 3 $\frac{1}{4}$ % or 3 $\frac{1}{2}$ % interest is paid, according as they are deposits at sight, at six months or a year.

With regard to the work of the Association in the year 1914-1915, we shall give the following particulars we reproduce from the Report for the year.

In the year under consideration, 79 new members were registered in the books of the Association, so that the total number has increased from 3,180 to 3,259. The revenue of the society during the year was 1,008,835 pesetas and the expenditure 1,060,569 pesetas, so that there was a balance of 385,266 pesetas at the end of the year.

The Association supplied its members with manure for 998,660 pesetas.

The following figures give an idea of the progress of this department.

Year	Value of Manure Supplied — Pesetas
1900	19,781
1904-1905	155,219
1909-1910	446,269
1914-1915	998,660

The value of the seeds supplied was 31,821 pesetas.

The credit bank has granted 367 loans for an amount of 101,264 pesetas. The amount of loans repaid was 95,000 pesetas; there remained consequently in safe on March 31st, 1915, bills for 69,802 pesetas. In the two

months during which the savings bank had worked at the end of the financial year, it had received 64 deposits for an amount of 17,835 pesetas and repaid two amounts, making a total sum of 2,150 pesetas.

Although the above figures give but an imperfect idea of the work of the Zaragoza Farmers' Association, they still show the efficiency of all its departments which have benefited the farmers of the district in many ways and have made this institution a real model, in comparison with those of similar aim existing in Spain.

UNITED STATES.

1. -- A GENERAL CO-OPERATIVE SOCIETIES ACT IN NORTH CAROLINA. --

On March 8th, 1915, the General Assembly of North Carolina passed a short Act (Chapter 144, Public Laws 1915) entitled "An Act to Provide for the Incorporation and Maintenance of Co-operative Organizations." The act is framed very much upon the lines already familiar in similar legislation in other States, -- in California, Wisconsin, and Massachusetts, for example. It empowers any number of persons, not less than five to form themselves into a co-operative association or society "for the purpose of conducting any agricultural, dairy, mercantile, mining, manufacturing or mechanical business on the co-operative plan." The promoters are required to sign and acknowledge written articles which shall state the purposes for which the association is formed, the amount of the authorized capital, the number of shares subscribed and the par value of each share. One copy of such articles is to be filed with the Secretary of State and one with the Superior Court of the county in which the association proposes to establish its principal place of business. The promoters at the time of signing the articles are required to draw up bye laws which shall declare and establish: (1) the qualifications for membership; (2) the conditions upon which shares may be issued, paid for, transferred and withdrawn; (3) the manner in which the reserve fund shall be accumulated; (4) the manner in which the dividends shall be determined and paid to members. In the case of selling agencies or productive societies the bye-laws must also contain regulations for the grading of products contributed by the members and for the sale of such products through the association.

No shareholder in any association may hold shares amounting to more than 20 per cent. of the paid up capital of the association or be entitled to more than one vote; nor shall any shareholder be personally liable for any debt of the association. A co-operative association shall reserve the right of purchasing the shares of any member whose shares are for sale, and may restrict the transfer of shares to such persons as are eligible to membership.

Section 13 of the act deals with the distribution of the profits earned by an association. Out of such profits there shall first be paid a dividend

upon shares not exceeding six per cent. Next, ten per cent. of the net profits shall be placed to a reserve fund until such fund is equal to thirty per cent. of the paid up capital; and two per cent. shall be placed to an educational fund for the diffusion of a knowledge of co-operative principles, and the remainder of such profits shall be distributed among the members and employees of the association in proportion to their dealings with the association or the salary or wages they are receiving from it. No earnings shall be distributed not less often than once in twelve months.

Every association organized under the provisions of the act shall annually, on or before the first day of March of each year, make a report to the Secretary of State, and such report shall show, for each association the total amount of business transacted, the amount of share capital subscribed for and paid up, the number of shareholders, total expenses of operation, amount of indebtedness and amount of profits and losses.

Any existing co-operative association may be included within the operation of the act and be bound by all its provisions, provided that the shareholders by a majority vote shall elect to be so included and bound.

The present act has evidently been designed with a view to the requirements of co-operative societies for sale and for production and sale. Credit societies (or credit unions as they are usually called in the United States) are provided for in North Carolina by a special act of the General Assembly. The administration of both acts will be placed under the care of the Division of Markets and Rural Organization created (as a bureau of the North Carolina Agricultural Experiment Station) in June, 1913.

* * *

2. THE JEWISH AGRICULTURAL AND INDUSTRIAL AID SOCIETY: CO-OPERATIVE CREDIT AND CO-OPERATIVE PURCHASE IN 1914. — The annual report of the Jewish Agricultural and Industrial Aid Society shows that during 1914, or more precisely, during the latter half of 1914, it was found necessary to curtail the work to some extent at least in more than one direction. One of the principal activities of the Society is the granting of loans to Jewish farmers for the purchase of equipment, the construction of buildings, the repayment of mortgages and other purposes. These loans had to be restricted as far as possible after the outbreak of war in Europe with the result that, for 1914, there was a considerable reduction as compared with the three previous years, both in the number of loans made and in their total amount. The number of loans fell from 423 in 1913, to 327 in 1914, and their total amount from 244,977 dollars in the former year to 170,811 dollars in the latter.

Another important branch of the work of the Society is the organization and supervision of agricultural credit associations (or unions), and under the unfavourable conditions which prevailed last year this work also necessarily suffered. The first credit unions organised by the Society — which were also, it may be mentioned, the first of their type to be organised

in the United States — were founded in 1911. Three were founded in that year, five in 1912, nine in 1913, but only one in 1914. The societies already in existence, however, maintained their position in spite of a small falling off in their membership and a considerable relative increase in their expenses. In 1913, on September 30th, there were 17 credit unions in activity, with 517 members, and their expenses, from their foundation up to that date, amounted to 726 dollars. In 1914, on the same date, the membership of these 17 unions had fallen to 504, while their expenses had risen to 1,427 dollars, or in other words expenses increased during 1914 by 701 dollars, an amount practically equal to the total expenses of the unions during the three years 1911, 1912 and 1913. One union with 32 members was organised in 1914 and the position of the 18 unions on September 30th, 1914, was as follows: Number of members 536, loans outstanding 26,153 dollars, interest collected 3,383 dollars, reserve 249 dollars, total assets 29,578 dollars and total liabilities 27,403 dollars. It appears, therefore, that the unions, though they are small and, judged by American standards, perhaps almost insignificant in size, are at least financially sound.

Another co-operative enterprise which is very largely a creation of the Jewish Agricultural and Industrial Aid Society is the Purchasing Bureau of the Federation of Jewish Farmers. The Federation was formed in 1909 mainly through the efforts of the Agricultural and Industrial Aid Society, and was designed to act as the central body of the Jewish farmers' agricultural associations scattered in different States. It began with 19 associations and, at the end of 1914, consisted of 63 associations organised exclusively for agricultural purposes. In 1910, it took up the business of co-operative purchase on behalf of its member-associations, and the growth of the Purchasing Bureau may be seen from the following table which shows the total amount of its purchases of each commodity in each year from 1910 to 1914.

	1910	1911	1912	1913	1914
Fertilizers	\$7,693.49	\$15,241.09	\$23,243.48	\$20,071.87	\$22,056.32
Seeds	1,145.43	5,387.01	14,592.52	11,023.28	11,635.80
Silos and Dairy Supplies	1,216.20	3,416.64	4,314.88	4,792.49	6,395.37
Spraying Supplies	297.05	458.85	685.66	271.16	288.14
Lime	261.06	1,211.50	1,589.21	1,466.17	760.00
Agricultural Machinery	1,113.35	3,842.13	4,564.12	3,919.38	3,465.83
Feed	—	644.10	1,122.33	582.50	1,068.52
Poultry Supplies	—	15.40	886.62	1,005.47	2,374.61
Miscellaneous Supplies	—	—	—	—	569.36
Totals	\$10,634.53	\$30,217.62	\$50,998.82	\$43,102.32	\$48,614.84

It will be noticed that in 1913 there was a falling off in the amount of business done as compared with 1912. The Secretary of the Agricultural and Industrial Aid Society, in his report for 1913, wrote as follows with reference to this falling off in the volume of business done, "While the Federation, owing to its limited funds, was this year obliged to curtail the credit of many of its members, the local merchants not only extended to them the credit which they formerly refused, but even offered more liberal terms and quoted better prices in order to get their trade and incidentally injure the Federation. The purposes of the Purchasing Bureau are thus served even if it does a smaller volume of business."

PROTECTORATE OF MOROCCO.

AN AGRICULTURAL COMICE IN MOROCCO. — An *Agricultural Comice of the Sebou* has just been founded at Kenitra. This Comice, which is intended for five territories, has the following general programme before it:

- (1) To study the different crops to be introduced into Morocco;
- (2) to pass resolutions and approach the authorities with a view to the development of agriculture and its branches;
- (3) to request the immediate application of the new real estate regulations and the registration of holdings;
- (4) to request the relief of agricultural machinery, grain and seeds from customs dues;
- (5) to obtain the authorization of the export of livestock;
- (6) to found a syndicate with special rules and a commercial aim.

It will have (a) to purchase for collective use, grain, seeds, trees, agricultural implements and machinery; (b) to sell the collective produce.

A regional agricultural bank will also be founded at Kenitra with local banks in connection with it.

Finally, the *Sebou Agricultural Comice* is preparing to organise agricultural shows and periodical exhibitions.

(Summarised from *Bulletin Economique du Maroc*, published by the *Service Economique*, of the *Residence Generale*, January-February, 1914).

SWITZERLAND.

SWISS PEASANTS' UNION IN 1914. — The seventeenth Annual Report of the Managing Committee of the Swiss Peasants' Union and the Swiss Peasants' Secretariat for the Year 1914 has just been published (1) and we reproduce the following information from it.

(1) *Publications du Secrétariat des Paysans suisses*, No. 50. XVII^e Rapport annuel du Comité directeur de l'Union Suisse des paysans et du Secrétariat de Paysans suisses. 1914. Brugg, 1915.

The 26 sections making up the Union had, at the end of the working year 1914, altogether 182,940 members, showing an increase of 6,124 as compared with the preceding year. The largest number of members, 61,673, is found in the Swiss Agricultural Society.

The Union occupied itself with the following matters: (i) Law on Epidemic Cattle Disease; (ii) Application of the law on Sickness and Accident Insurance; (c) Customs Tariffs.

To deal with the large number of requests for information in regard to insurance that have reached the Union and Secretariat, a "Sickness and Accident Insurance Information Office" had been instituted, as decided on by the Committee of the Union in 1912, and now the rules for its working have been drawn up. The Office has especially occupied itself with compulsory cantonal insurance, doctors' tariffs, and voluntary accident insurance.

In regard to the economic measures in connection with the war, the Union has rendered considerable and valued services, directly co-operating with the Federal Agricultural Department in the solution of several important problems, amongst them those of the estimation of the supplies required for Switzerland, of checking the rise in prices, and the supply of livestock, milk, cheese, hay and straw to the army.

The Office for information in regard to prices drew up reports, published a "Review of the Markets", prepared reports on the international market for dairy produce and reports for the International Institute of Agriculture in Rome.

The Valuation Office prepared expert reports and estimates at the request of private individuals, in case of inheritance and purchase of real estate, applications for credit, damage to farms etc.; the Office has likewise co-operated in cases of judicial valuations.

Finally, the Swiss Peasants' Secretariat has occupied itself with the preparatory revision of the commercial treaties, the work in connection with the National Exhibition, researches in regard to the yield of agriculture etc.

Part II: Insurance and Thrift

GERMANY.

LOCAL MUTUAL LIVESTOCK INSURANCE SOCIETIES IN THE KINGDOM OF PRUSSIA.

by Dr. G. Rocca.

In former articles on the subject of livestock insurance published in this "Bulletin" it has been shown that nearly every State has of late years endeavoured to promote the institution of mutual societies for insurance of livestock, and to regulate their working, improving by means of legislation their rules and the conditions of their policies, encouraging the existing mutual societies by means of prizes and grants and facilitating re-insurance against risks. This system has been pursued under the conviction that the development of livestock insurance must proceed in proportion to the increase of livestock improvement, and that insurance itself contributes largely to the prevention of diseases of livestock. It is well known that the insurance of livestock may be and is organised by public institutions and by private enterprise; the public institutions are sometimes administered directly by the State, sometimes by provinces or communes; private enterprises may either be profit seeking companies or mutual societies with a sphere of action extending to a whole State or district or limited to one or more communes. To these last belong the local mutual societies of insurance which represent, according to the prevailing technical opinion, the best form of organisation in this branch of agricultural thrift, facilitating a rigorous supervision of the risks undertaken, and reducing the working expenses to a minimum. It is calculated that in Germany there are about 12,000 local mutual insurance societies, and that the livestock insured in them has a total value of about 800,000,000 marks. As the statistics re-

cently published with respect to their development and technical and administrative organisation (to refer to the Kingdom of Prussia alone, we shall endeavour in the following pages to trace the outlines of their organisation there, in the belief that the leading principles of the constitution and working of these mutual societies should be substantially the same in all countries).

§ 1. ADMINISTRATIVE ORGANISATION.

It must be especially observed that as a rule the local mutual societies only undertake the risk of death of livestock and not the risk of slaughter. Insurance in case of death is intended to compensate the proprietor for the loss he has suffered if the animal has been killed, or rendered unfit through disease or accident for the purpose it had to serve; but the risk of slaughter refers to the damage caused by the confiscation of the animal slaughtered in obedience to laws respecting diseases in cattle. Insurance against this latter risk is clearly a much more recent thing than the first, and dates only from the time when the inspection of butchers' meat was made compulsory by law, and it is generally undertaken only by mutual associations of butchers, instituted for the purpose. The local mutual societies for insurance against death of livestock are regulated by the Imperial Law of May 12th, 1901 for the supervision of private enterprises of the kind; but small societies are exempted from many formalities required in the case of larger associations. By "small societies" must be understood those which, according to their regulations, have a sphere of action strictly limited either as to the risks they undertake and the locality in which they work, or as to the class of persons to which their members belong.

In Prussia, the greater number of societies for the insurance of cattle belongs to the category of "small societies", and they are therefore exempt from many formalities in regard to the publication of the transactions of the society and the constitution of a vigilance committee etc.

It is to their interest to be officially recognised by the Government as "small societies", as thus they escape obligations imposed by the above-mentioned law and by the Commercial Code on societies with a complex administration. They receive this recognition from the district administrations so that the supervision of the numerous local agricultural associations is wisely decentralised. Several imperative provisions of the imperial law as to insurance contracts, to which insurance policies of private enterprises must wholly or in part be made to conform, are not applicable to local mutual societies.

But for these the imperial office for the supervision of private insurance enterprises has drawn up a model code, taking into account the special

(1) See FRATZSCHER, Das örtliche Viehversicherungswesen im Königreich Preussen. Berlin-Parey, 1911.

conditions under which they must work. The following particulars respecting this code are to be found in a publication by Dr. Fratzscher.

Admission to the society must be allowed to every owner of livestock domiciled within the district; as a rule none are excluded except wholesale dealers, butchers and those owners of livestock who are proved to be neglectful of their animals. A member may withdraw from the society by giving notice of his intention before the end of the current year, or he may be expelled if he persistently neglects to pay his premiums or commits some breach of rules that may be injurious to the interests of the society. Except in these cases the society has no right to expel any owner of cattle. In the case of the death of a member or of his transfer of all his insured livestock, his rights pass to his heir or to the purchaser, but the society may, however, cancel the contract as regards the latter within a month. The society is obliged to observe this term of one month, but a declaration of withdrawal on the part of a member is valid and takes effect immediately.

The *administration* of the society is in the hands of the board of management and the meeting of members. The board is elected for one or more years by the meeting of members and is composed of at least three but usually five or more members, of whom one is president, another cashier, a third secretary, and the others substitutes or assistants. To these are entrusted the judicial or extra-judicial representation of the society and the general management of its business; they decide in regard to the admission or expulsion of members, the keeping of the registers and accounts, the amounts of the premiums and compensations, the convocation of the members, and the investment of the funds. This board thus discharges all the functions which in large societies are entrusted to a committee of inspectors, that is to say it has the duty of examining the registers, the accounts and the business of the society. In these local societies it is comparatively easy for all the members to judge of the proceedings of the board and the difficulty of finding competent persons to place in official positions has to be taken into account. It is therefore better to concentrate all the powers tending to ensure the regular administration and good working of the society in the hands of a single board.

But, in addition to this board, the general meeting may select from among the members persons of experience to estimate the value of the livestock to be insured or the loss of which is to be compensated for. As a rule insured animals should be valued frequently by experts; horses and horned cattle should be valued quarterly or half yearly; pigs oftener, — once in every month or two months, because they are not insured according to value, but per head. (1) The experts will act gratuitously, having a claim only to the payment of their expenses incurred for the benefit of the society. According to the model code, the members of the board of management should not be paid; so that the working expenses and the members'

(1) See WEILANDT: Wie gründet und leitet man ein Viehversicherungsverein. — Sonder-Abdruck aus dem Archiv des Deutschen Landwirtschaftsrat. Berlin, 1910.

premiums may be lower; exception is however made for the cashier and the meeting of members, notwithstanding the code, often grants the members of the board year by year compensation for their services.

The *general meeting* of members is called within two months from the close of each financial year, to consider the balance sheet, to appoint the board of management and other officers and discuss every other matter on the agenda. A special meeting may however be called if required by the interests of the society or if a written request has been made by a certain number of members (usually one-third or one-fourth, according to the society). Should this request not be conformed to by the Board within two weeks, appeal may be made to the authorities charged with the supervision of the society.

The provisions of art. 11 of the model code, intended to simplify as far as possible the working of the society, are worthy of notice. "The meeting of members is valid whatever be the number present; votes by proxy are not permitted, except for women and the incapable; otherwise each member has only one vote; he has none if through delay in paying premiums his claim to compensation in case of casualties has been suspended, or if the subject in question is his own affair or a question between him and the society." Questions between members and the society, for instance in regard to expulsion from membership or the amount of compensation, are decided by a council of arbitration of four persons elected annually by the meeting of members. In case of dispute, each side will appoint an arbitrator from among the four, and these two will choose a president not necessarily a member of the society. Against the decisions of the arbitrators appeal may be made to the law.

The office of supervision may prohibit the society from continuing its work, but its dissolution must be decided on at the general meeting. The dissolution must be approved by the majority of those present, three-fourths or two-thirds, according to the society. But it must be remembered that dissolution or proposed modifications of the code are not valid unless approved by the office of supervision.

In the case of dissolution, the general meeting appoints as liquidators the members of the board of management or persons not belonging to the society; if any funds remain, they are distributed among the members in proportion to the amount of premiums paid in the last few years; if there are debts, they must be paid by means of the exaction of supplementary premiums.

There are special rules respecting the *keeping of the registers* and as the importance of these in order to obtain accurate statistics as to livestock insurance is very great, it seems desirable to enumerate here the chief of them. Some societies insure individual animals according to their value, others insure the species, taking account only of the number of head. In the first case, the society must keep a register of insurance, with a description of the animals insured (species, sex, race, colour, characteristics, age, defects, mark of the society stamped on the horn) with the date of insurance, the results of the valuation made within the year, the average annual

insured, the cause of accidents and the claims paid. If the animal is insured against risks through castration or other operations etc., note must be entered in the register. In the second case (insurance according to species, in use especially with regard to pigs), a special register must show for every member the number of animals insured, the date of insurance, the declared value, the characteristics of the species, the number of accidents, with the amount of compensation, and lastly the cause.

In the cash book the receipts must be specified according as they are provisional premiums, special premiums for accessory insurance (operations, castration, calving, foaling etc.) supplementary premiums, entrance fees, policy and stamp duty, profits from the sale of animals. The expenses must also be specified according as to whether they are paid as claims or as veterinary surgeons' fees or for the care of animals, or working expenses.

§ 2. TECHNICAL ORGANISATION.

The model rules suggested by the Imperial Office for inspection of insurance undertakings contain also the general conditions for policies which every local mutual society must adopt and which are calculated to produce a general uniformity in the technical working of these societies. As is usual the conditions for policies in an insurance society may be divided into three groups; selection of risks, payment of premiums and estimates of damages.

(a) *Selection of risks.* — Every member is obliged to insure all the animals of one species such as horned cattle, horses etc. which he possesses in the district in which the society works. He is also obliged to report any change in the number of animals insured; if the number is increased, he must ask for a supplementary insurance. In case of loss, if all the animals have not been insured, the society is free of all obligation to compensate. The society is not obliged to compensate even for the animals reported, unless the member be able to show that it was not his fault that there was no supplementary insurance.

No animal may be insured if declared unsound by the judges; no animal under suspicion of epidemic infection coming from stalls in which any case of contagion has been ascertained during the last six months; and no animals which have not yet reached a given age, generally six months for horned cattle and for sheep, goats etc. from four to six weeks.

The two first exceptions are based on the necessity of preventive measures every mutual society must observe, and the third on the fact that the rate of mortality among very young animals is high, and hence the advisability of their having passed a certain age, as proof of their vitality, before they are insured. As Weilandt says, the number of casualties among old animals is also exceptionally high, and therefore many mutual societies limit the age for insurance, for instance to from 12 to 15 years for horses and horned cattle.

As already observed, insured animals must be examined by qualified experts and the value fixed by them will be the sum insured. And that this sum may correspond with the real value of the animal, the valuers are bound to make frequent inspection to confirm or rectify the first estimate. In the case of horses examination must be made twice a year in the case of horned cattle four times and in the mutual societies for insurance of pigs and goats six or eight times.

The object of these frequent inspections is evident; in the first place to insure that the animals are not valued above their worth, which might lead to abuses and the reporting of cases of slight damage; in the second place to ensure the good feeding of the stock, proper care being taken of it and its employment in conformity with good, practical methods for preventing epidemic disease or reducing the damage caused thereby.

In some societies the amount assured is not calculated on the valuation but according to the age of the animals. The risk is limited, with a maximum amount fixed per animal, beyond which no compensation is guaranteed: for horses the maximum limit varies from 1,000 to 1,800 marks, for horned cattle from 500 to 600 marks.

* * *

(b) *Payment of premiums.* -- The societies are maintained by the entrance fees of members and their annual contributions. Entrance fees are paid either only by new members on their admission or on each new animal insured. Under this second system, therefore, he who possesses most livestock pays the largest amount. As a rule, Weilandt says, these entrance fees vary according to the kind of animals insured; and are for every horse from 3 to 5 marks, for each head of horned cattle from 2 to 3 marks, for every pig from $\frac{1}{2}$ mark to 1 mark, and so on.

Likewise for the annual contributions or premiums there are two systems in vogue: in one, provisional premiums are required with the reserve, in case of need, of the exaction of supplementary premiums. The second is the system of levy. Under the first the premiums are paid once every six months, every three months or every month, according to the society; but, if at the end of the financial year the entrance fees have not been sufficient to cover the necessary expenses, it becomes necessary to ask for supplementary premiums, and all members are obliged to pay them in proportion to the amount of the provisional premiums. On the system of levy, the amount of the premiums to be paid is divided among the members after every loss or at the end of a fixed period, for instance, three months. Usually provisional premiums as well as levies are fixed according to the value insured. For pigs, however, they are calculated on the number insured, the same premium being paid whether the animal in question be large or small or of less or greater value. This system is employed because the value of pigs changes week by week and frequent valuations would be too costly. For all other animals, however, the

principle remains that the premiums must correspond with the value of the insurance, subject as already said, to frequent revision.

Generally the premiums required by the local mutual associations are less than those asked by the larger societies; they are in the case of horned cattle from 1 % to 2 % of the value insured, in that of horses from 2 % to 3 %, in that of pigs from 3 % to 4 %, and in that of goats from 4 % to 5 %. The amount of the premium depends on the locality in which the animal is kept, on the more or less favourable treatment it receives, on its state of health etc.

Weilandt wisely advises new societies to keep their premiums rather high, so as not from the very start to run the risk of a deficit and to be able to form a reserve fund. He also recommends a classification of risks according to the sex of the animals insured, and a higher tariff, specially for cows and heifers as they are subject to a higher mortality.

The larger insurance societies generally classify the risks for all descriptions of live stock according to the use to which they are destined; for instance horses, whether for carriage, saddle, farm or draught use. The local mutual societies, however, have no need for such distinctions, including, as they do, all risks in one single category. Classification of risks only serve them for the settlement of compensation and in any case classification is not made as to the destination of the animal but according to its age and value.

When premiums, whether provisional or supplementary, or levies, are not paid up when due, the society must request the defaulter to pay the amount within two weeks from date of the notice. If the debt then remains unpaid, the society is freed from any obligation for claims until the payment is made, and the expulsion of the member may even be considered. These conditions must be mentioned in the demand for payment, so that the defaulter may know the consequences of his conduct.

And it is to be observed, that the Prussian model rules impose the formation of a *reserve fund* to meet special expenses, particularly in years when epidemic disease is prevalent. As a rule, it must amount to 100 % of the total of the annual premiums received, and as a society receives annually in premiums on an average 2 % on the values insured the reserve fund should at least amount to that proportion. The reserve fund should consist of the entrance fees, a given proportion of the annual premiums, as fixed by the rules (usually 5 %), the credit balance of the year's accounts and all other extraordinary revenue.

When the fund amounts to the due proportion of the insured value, the society is authorised to draw from it two-thirds of its amount to meet the ordinary expenses. The fund must be deposited at interest in a savings bank.

* *

(c) *Estimates of losses.* — In case of sickness or death of an insured animal, the member is obliged to notify the Presidential Office of the

Society, which in a case of sickness will decide as to the treatment or slaughter of the animal, and in case of death will estimate the value. Generally the expense of treatment is paid by the owner, but this is not always convenient; some of the mutual societies, therefore, undertake the whole expense or require the member to pay a portion; for instance, the society may pay the veterinary surgeon, while the member pays for the medicines and other expenses in connection with the treatment.

The larger societies are accustomed to fix a period before the society must satisfy claims; the object of this is to prevent insurance of sick animals, in the hope of obtaining compensation for them. But in the local mutual societies in which the members are not only acquainted with each other but also with the state of each other's livestock etc. this prudent measure is not necessary, the rather as the inspection of the animals for purposes of insurance is made by valuers, who being themselves members are likewise interested in the prevention of epidemic disease.

With a view to incite members to take good care of their animals and prevent accidents, compensation is seldom given in proportion of more than 65 %, or 80 %, of the loss incurred, that is of the value insured or estimated. In case of the slaughter of the animal, when the flesh is unfit for use, and the slaughter has been made by the society, the profit goes to the society; but if the animal be slaughtered by the owner on his own account the proceeds of the sale are deducted from the amount of compensation. Thus, as Fratzscher (1) says, the estimated value of a horse slaughtered on account of a broken limb may be 1,000 marks and the owner may obtain 100 marks by selling the flesh to the butcher and the rules of the society lay it down that the compensation in case either of the death or slaughter of the animal may not exceed 75 %, of its estimated value; therefore, in the above case, the compensation paid by the society would be 75 % of the difference between 1,000 and 100 marks i. e. 675 marks.

The claim for compensation is less when the loss arises from epidemic diseases, when the member has a claim to compensation from the public authorities, if he has not transgressed the rules of veterinary police. We may see by this the strict relation between the regulations for the health of livestock and the agricultural mutual societies; an Imperial law of June 20th., 1900 and the executive regulations for the Kingdom of Prussia of May 1st., 1912 are very strict in regard to the reporting of contagious livestock diseases and contain a long series of regulations calculated to diminish the dangers of epidemic cattle diseases. They guarantee also, under certain conditions, to all owners of livestock attacked by such disease, and confiscated, ample compensation from the State and from the Province. Losses caused by popular agitation are never compensated for, nor are losses resulting from orders of the military authorities in time of war, or after declaration of war, and no claim to compensation can be

(1) See "Landwirtschaftliche Versicherung", page 129 (Versicherungs-Bibliothek), Berlin, 1914, Mittler und Sohn.

able for losses due to fire or lightning as these risks are generally covered by insurance in other societies.

Should a member be guaranteed against unobserved defects in an animal insured, or should he have a right to compensation for damages against the person from whom he bought the animal, or other persons, he must cede these rights to the society in so far as it compensates him for loss: but the cession of the right must not be to the detriment of the member. If the guarantee be void through the fault of the member (for instance in not availing himself of it within the time limit prescribed by the Civil Code), the society is exempted from the obligation of compensating him inasmuch as it would have been able to re-imburse itself, by availing itself of the right.

For horned cattle, horses and goats, compensation is calculated on the value as estimated by the valuers at the time of the last inspection. But for pigs, it is often calculated on the weight of the animal, keeping in mind the ordinary prices on the local market at the time of the loss, for the value of pigs changes every week and an estimate some time previous to the loss would not be a sufficiently exact guide for deciding the amount due as compensation.

The compensation when fixed, must be paid immediately or with but a few days' delay.

The society is relieved from the obligation of compensating the member suffering a loss, as above said, when all his animals of the same species have not been insured in the society, and also in the following six cases detailed in the model code as under:

(1) — if the member insuring has furnished inaccurate statements, in regard to the state of health of any animal and should it die in consequence of any ailment not declared, unless the inaccurate declaration were made without fault of the person insuring:

(2) — if the member or his servants or those employed by him have by intention or serious negligence caused the death of an animal confided to their care, (this rule is justified in consideration of the public interest in the protection of animals):

(3) — if the member or his servants or employees subject an animal to serious ill-treatment, or neglect it or do not conform to the rules laid down by the Presidential Bureau of the society, or the veterinary surgeon or the valuer, unless this has occurred without the fault of the member or the loss be not the consequence of the ill-treatment or neglect of the directions; (this rule in support of the authority of the veterinary surgeon or the valuer was made, Weilandt observes, not only for the benefit of the society, but also in the general interest, so that the livestock may be properly cared for):

(4) — if the member has not immediately notified to the society the sickness of the animal unless it were unimportant or in the absence of due notification he can prove himself to be without blame:

(5) — if the member have not immediately notified the death of the animal:

(6) — if the animal die in consequence of an operation which was not necessary or if necessary was not performed by a veterinary surgeon.

Thus we see that the cases by which a member may lose his right to compensation are fixed with precision and without excessive rigour in the model code; and the wisdom of these rules is manifest when we remember that the risk depends to a great extent on the diligence of the insured member and how necessary it is to take every measure to check the advances of epidemic cattle diseases.

The chief obligation imposed on the insured person is to notify without delay any accident or sickness among his animals; some societies require also that notice be given to the veterinary surgeon when any doubt arises as to the state of health of the animal, but if the member has to do this at his own expense and risk he will delay as long as possible; it is therefore better that the society be responsible for the expense of the veterinary surgeon, making a special contract with him in which his duties and his fees are laid down.

§ 3. STATISTICS AS TO THE DEVELOPMENT OF LOCAL MUTUAL SOCIETIES IN PRUSSIA.

The Royal College of Agriculture of the Kingdom of Prussia has recently published detailed statistics as to the working of the local mutual livestock insurance societies in Prussia, and as the statistics pre-suppose good technical regulations for this branch of agricultural association, we shall here point out the system followed for reporting and collecting the data.

In the first place it must be observed that every mutual society is obliged within four weeks after its general meeting to send to the supervising authorities a copy of its annual report and balance sheet. Both report and balance sheet are generally compiled according to a plan drawn up by the office of supervision itself. The annual report must show the number of members at the beginning of the financial year, the number of new members, the number of those who have resigned or been expelled, also the number of head of livestock insured with the total amount of insurance for each species, the premiums paid, the supplementary premiums, how many head have met with accidents and the amount of compensation. It must be stated whether the compensation was all paid at once, or in what proportion to the estimated value, and the cause of the accident must be given etc. The profit and loss account sent with the report must be clearly drawn up distinguishing between provisional and supplementary premiums and showing the entrance fees, the profits from sale of slaughtered animals etc. and, among the expenses, the amounts paid as compensation, as veterinary fees, working-expenses etc. Besides this profit and loss account, the society must show the amount of its capital and the variations in its reserve fund.

There is no limit placed upon the number of members; from the above mentioned statistics it appears that there are local mutual societies which have from 20,000 to 30,000 members, and others with only from 20 to 40. Weilandt observes that the smaller the number of head of livestock the more necessary is insurance. A society with 100 head of cattle is in a position to obtain within a year sufficient compensation for risks: "Admitting that within a year the annual percentage of loss is for horned cattle 3 to 4, for horses to 5, for pigs 8, for goats 6, the amount of the probable loss may be approximately ascertained. Even in bad years the losses may be doubled and covered by the means possessed by the society. The greater the number of cattle insured the greater is the probability that the losses in the various years will be the same. Experience has shown that in societies having less than 100 head of cattle the difference in the number of accidents in different years is very perceptible; sometimes the losses amount to three times the average, and sometimes they are less than one-fourth of the average. In a society insuring from 200 to 300 head of cattle the differences are less perceptible; on the other hand in a society insuring from 500 to 1,000, the result is not as favourable as might be supposed."

For a society insuring only one kind of animal, with 300 head there is a greater equilibrium of risks. Weilandt also, observes that in a large society officers must be more highly paid and the working expenses increased: the work of valuing and of supervising becomes more complex and costly and the premiums must rise in proportion. It is therefore better to constitute a small society even with only 50 head of cattle all of the same neighbourhood, than to constitute a large society with 1,000 head of cattle scattered over a large district or province.

* *

The Office of Statistics of the Kingdom of Prussia publishes every year the results of the census of livestock; thus in April of the current year particulars of the census of 1914 were published, but, as the statistics of the local mutual insurance companies are for the year 1912, we shall give here, quoting from the publication of Dr. Fratzscher, the data for that year. According to the census of December 2nd., 1912, in the 12 provinces of the Kingdom of Prussia there were in all 3,090,192 horses (exclusive of those required for military purposes), 11,817,553 head of horned cattle, 15,448,517 pigs, and 697,897 goats. The value of the horses (exclusive of those for military purposes) was calculated at 2,164,300,000 marks, that of the horned cattle at 4,093,500,000 mks., that of the pigs at 1,176,600,000 mks. and that of the goats at 50,600,000 mks. giving thus a total value of 7,485,000,000 marks.

Livestock improvement was carried on chiefly by small farmers or proprietors of average sized farms who, it is well known, have more need than large landowners to have recourse to insurance.

Considering that calves, foals, lambs and young pigs are seldom insured, Fratzscher maintains that the total value of animals liable to be insured in the Kingdom of Prussia is about 5,000,000,000 marks. He calculated

that in the large societies of the Kingdom a value of from 100,000,000 to 120,000,000 mks. is insured while in the local mutual societies in 1912 the value insured was more than 448,000,000 marks, that is about four times as much.

The statistics of local mutual societies have been compiled from the replies to lists of questions sent to all the presidents of societies for insurance against death of livestock; setting aside societies for insurance against risks of slaughter, the provincial and district administrations were expected to see that the statistics should be reported in a uniform manner, and, according to the rules laid down by a commission appointed for the purpose.

The following table shows the statistics collected by the census for all the 12 provinces.

Development of Local Mutual Societies

Provinces	Number of Societies	System of Collecting Premiums					
		Provisional Premiums		Levies		Number	
		Calculated in proportion to		Calculated in proportion to		of	
		Total	Locally Constituted	Amount Insured	Head of Livestock	Amount Insured	Head of Live- stock
1 East-Prussia	102	38	78	8	14	2	9,041
2 West-Prussia	11	8	5	3	2	1	2,318
3 Brandenburg	419	189	52	269	58	40	68,688
4 Pomerania	169	86	31	93	21	21	25,098
5 Posen	2	2	1	—	1	—	21
6 Silesia	33	26	6	11	4	12	2,811
7 Saxony	642	338	223	333	53	33	119,547
8 Schleswig-Holstein	752	112	112	230	373	37	80,772
9 Hanover	1,947	834	490	539	735	183	164,267
10 Westphalia	1,321	483	498	377	395	51	132,043
11 Hesse-Nassau	1,013	346	700	97	210	6	81,698
12 Rhine Province	1,526	597	1,131	179	204	12	119,899
Total	7,931	3,059	3,327	2,139	2,070	398	807,000

As shown in the table the number of mutual societies varies according to provinces, from a minimum of 2 in the province of Posen to a maximum of 1,947 in Hanover, but even in the same province there are great differences

given societies as regards the number of members and the number of head of livestock insured. Thus, for instance, in East Prussia the mutual society of Heiligenteil has 30 members with 39 head of horned cattle, while that of Heilberg has 2,390 members with 3,010 head of horned cattle; in West Prussia the mutual society of Marienwerder has 30 members with 1 head of horned cattle and that of Angermünde has 7,713 members with, 1 horse, 204 head of horned cattle, 26,357 pigs, and 7 goats; in Hanover a mutual society of the city of Emden has 58 members with 305 head of horned cattle, and that of Lüneburg has 31,419 members with 13,018 pigs, 29,707 head of horned cattle, 61,458 pigs, 370 goats etc.

As already stated, the legally constituted mutual societies are those which are regulated by the Imperial Law of May 12th., 1901, relating to the

Kingdom of Prussia in 1912.

Set of Animals Insured			Amount	Premiums	Compensation	Working	Capital
			Assured	Collected	Paid	Expenses	(Reserve
Pigs	Goats	Total					Funds)
			marks	marks	marks	marks	
—	—	13,570	2,930,705	38,341	40,200	4,173	26,496
0,726	—	9,099	1,132,312	25,051	40,214	3,662	21,966
171,445	1,326	195,050	16,659,530	555,286	498,132	87,067	754,813
40,977	—	51,963	3,224,900	153,080	153,875	18,331	185,337
—	—	191	53,681	316	122	38	200
1,632	—	10,256	2,089,978	17,591	10,712	1,715	23,139
218,637	9,705	297,933	46,290,189	1,240,304	1,238,931	118,301	1,344,271
175,310	1,106	304,633	70,367,034	1,754,686	1,782,782	73,712	245,834
408,884	6,955	629,965	96,992,190	1,988,178	2,029,229	115,128	970,892
148,850	8,299	397,462	55,874,616	1,234,847	1,274,670	99,355	1,003,116
73,811	11,957	269,864	64,485,501	1,158,238	1,494,934	76,947	954,996
69,842	9,995	302,964	83,916,505	1,838,755	2,071,129	131,751	1,186,233
1,316,100	49,338	2,392,950	448,018,090	9,984,688	10,343,830	734,080	6,717,523

provision of private insurance societies, and by this law authorised to transact business throughout the Kingdom; those not legally constituted before those which were working before 1901 and have not yet adapted their

rules to the provisions of the law. These societies are, however, like the others, subject to the control of the special government offices.

This table also shows how much more widely diffused is the system of collecting provisional premiums with the reserve of recourse to supplementary premiums in exceptional cases, than that of levies. Of 7,934 societies, 5,466 have adopted the first system, and only 2,468 the second. More than half of the animals insured are pigs, and more than one third are horned cattle; the number of horses and goats is much smaller. Fratzscher observes that, according to the results of the census of cattle of December 2nd, 1912, the number of horses insured in the local mutual societies is 6.1 % of the whole number of animals included in the census, the number of horned cattle is 7.1 %, of pigs 8.5 %, and of goats 2.3 %.

The whole amount of the value insured is, according to the table 448,018,000 marks, which is, as already observed, about 4 times the value insured in the large societies, but taking large and small together it will be seen that only about one-tenth of all the livestock included in the census is insured. This shows, adds Fratzscher, how much remains to be done in order that livestock insurance may be known and appreciated by all agriculturists.

In 1912 the premiums amounted to 9,984,668 marks, and the compensations to 10,343,830 marks; with regard to this, Fratzscher observes that in the insurance of livestock the outlay in compensation often exceeds the amount of the premiums, because another important source of income for the society is the profit from the sale of slaughtered animals that have become its property. But as many local societies usually leave to the policy holder the profit from the sale of the slaughtered animal, subtracting the amount from the compensation, statistics cannot usually supply data as to the proceeds from such sale.

The working expenses, amounting to 734,084 marks, are 7.4 per cent of the premiums collected, a proportion far inferior to that in large societies. Lastly, the capital of 6,717,523 marks is generally invested in savings banks and local credit institutions.

§ 4. REINSURANCE IN LOCAL MUTUAL SOCIETIES.

We have already pointed out the advantages to be derived by agriculturists from the development of local mutual livestock insurance societies; by reducing the cost of administration to a minimum the tariff of premiums may also be reduced, while this form of association is adapted for the verification of risks, and the prevention of epidemic cattle diseases, and also for the checking of fraud. But, since local mutual societies generally work within narrow limits, it becomes difficult for them in years when losses are exceptionally frequent to exact from their members premiums high enough to cover all losses. The loss caused by epidemic thrush and

phrax need only be considered, and the difficulty of enforcing special sanitary measures against the diffusion of these diseases.

To meet still more serious and exceptional losses the mutual societies of one district or province ought to form a federation in order that the risks may be distributed among a larger number of persons in conformity with the general principle of insurance that the probability of an event is more easily to be determined the greater the number of those exposed to the risk. Thus if a single mutual society intends to extend its business over a large tract of territory it will encounter a difficulty, namely that the verification of risks will be difficult and costly and it will therefore be necessary to raise the tariff, so that if the premiums are to be kept low the only resource will be re-insurance.

Mutual societies generally reinsure one another reciprocally, constituting a federation, to which each society cedes a proportion of its risks (proportional reinsurance) or cedes those risks which exceed a given sum (re-insurance of excess). In Prussia, there is an example of the second system in the mutual society for reinsurance at Treves in the Rhine Province.

In the district of Treves, where 13 local mutual societies are now working, a federation for the purpose of reinsurance has existed since 1885. Each society must require from its members a single premium of 2 % of the sum insured for horned cattle and 5 % of that for goats. When the premiums are paid, the society must pay to the Federation 15 pfennigs for every mark which, in the case of horned cattle, is in the proportion of 0.3 % of the value assured and in the case of goats of 0.75 %. If the society is unable to meet its losses with the means at its disposal, after having paid its contribution to the Federation, the latter must pay the balance of claims which the society is unable to. But those societies which from their first joining the federation have received in all a sum in compensation greater than that which they have paid in premiums have a right to assistance from the federation only up to the amount of half the compensation remaining to be paid, and for the other half they must exact supplementary premiums from their members. The federation must also form a reserve fund amounting to at least 0.1 % of the whole sum insured in the federated societies; when, in the course of the financial year, this proportion diminishes, the Federation is authorised to demand from each society the payment of supplementary premiums. As we have seen, the Federation of Treves has adopted the system of reinsurance of excess; a system to which however there is this objection that the local societies have no interest in preventing losses which exceed what is called the "full risk" if the excess is only to be charged to the Federation.

In Prussian Saxony the Chamber of Agriculture has created a form of sharing house for premiums among the 43 mutual societies of the province. From the balance sheets of each society, a calculation is made of the losses of the last five years, and the average premium required to cover them; the society binds itself to collect from its members in the next five years prem-

iums equal to this average, paying one-fifth to the Federation, and endeavouring with the rest to cover all the losses up to a certain proportion previously fixed. The losses in excess of this proportion will be compensated by the Federation. For each society the Federation keeps a separate account on the credit side of which are entered all the premiums paid, and on the debit side all the claims paid; the accounts are closed every five years and the debit or credit balance carried forward to the next period of five years during which an effort must be made to balance the account by increasing or diminishing the tariff of premiums. By this system the societies avoid for at least five years any sudden changes in the tariff, which arouse discontent among insurers, and check the development of insurance.

Pratzscher observes that also to this system there is the objection that compensation for losses can be given only if the number of societies that close their accounts with a profit is in a certain proportion to those in less favourable condition; should all the societies in the same year meet with serious losses the Federation would not have means to compensate all. On the other hand, the system of proportional reinsurance adopted by the mutual societies of the Grand Duchy of Baden and the Kingdom of Bavaria according to which the societies first pay to the Federation a proportion of the risks, does not prevent perceptible differences between one year and another in the need for increased premiums in single societies.

The mutual societies of Brandenburg, Silesia and East Prussia have therefore recently adopted a combined system of proportional reinsurance and reinsurance of excess, by which the Federation does not assume a share of all the risks, nor the excess above a certain sum, but only a share of the excess. Thus the society bears the risks of ordinary years alone, ceding to the Federation a part of its exceptional risks; the percentage of risks assumed by the Federation is in Brandenburg $\frac{2}{3}$ rds., in Silesia $\frac{3}{4}$ rds. and in East Prussia $\frac{4}{5}$ rds. As a rule losses are considered exceptional when they exceed 80% of the average of the previous years. By carefully determining the average, the societies are in a position to fix tariffs of suitable premiums that may be applied without variation for several years with great advantage to the members and to the development of the societies.

Lastly, the Federation does not prevent societies from retaining their administrative independence; as Pratzscher remarks, the rules of federated societies may differ; one society compensates for losses up to 60% of the insured value, another up to 80%, some undertake risks during pregnancy, others charge themselves with the fees of the veterinary surgeon, etc.; but these differences are appreciable, when the average loss and the amount of the premiums paid for risks are determined. It is however certain that the Federation does not limit itself to reinsurance, but it endeavours to perfect the technique of single societies, to improve their administrative and financial organisation, and to promote the constitution of new mutual societies. The larger agricultural associations of Prussia have encouraged the development of these federations, because they see that their work is efficacious in promoting livestock improvement, and that efforts to ch.

contagious diseases in animals can only be efficiently made when the subject is studied not only from a sanitary but from an economical point of view. To diminish mortality in cattle, quarantine regulations are not sufficient ; yet declarations of infected districts, nor disinfection of infected stalls or pasture grounds, nor sanitary certificates ; continuous and assiduous preventive action must be vigilantly carried on and this can alone be done by local mutual insurance societies.

BELGIUM.

THE WORK OF THE INSURANCE SECTION OF THE BOERENBOND (PEASANTS' LEAGUE) IN 1913.

SOURCES:

SIXIÈME SECTION CENTRALE DU BOERENBOND OU LIGUE DES PAYSANS: ASSURANCE CONTRE L'INCENDIE ET LA GRÊLE ET SUR LA VIE; ASSURANCES MUTUELLES. D'après le Rapport du Boerenbond belge, exercice 1913, présenté à l'assemblée générale du 1^{er} juin 1914 par: Chanoine E. Luytgaerens, S. Th. B., Secrétaire général. (*Sixth Central Section of the Boerenbond or Peasants' League: Insurance against Fire and Hail and Life Insurance; Mutual Insurance Societies. According to the Report of the Belgian Boerenbond, 1913, presented to the General Meeting on June 1st, 1914, by Canon E. Luytgaerens, S. Th. B., General Secretary.*)

The *Boerenbond*, with which we have dealt in the present number of this Bulletin in the Part devoted to Co-operation and Association has also a section for fire, livestock, hail and life insurance. We shall give here, a short account of the work of this section in 1913, to complete our notice of the other sections of this association.

§ 1. FIRE INSURANCE.

In 1913 the branch dealing with fire insurance developed notably: 3,815 policies were issued and 1,361 were modified. The net result for the year, after deducting cancelled policies, amounted to 1,188 contracts for insurance for 26,500,801 francs, the largest amount of business done since the service was started.

The premiums paid during the year amounted to 165,107 frs., to which 7,174 francs must be added for cost of policies.

It is noteworthy that whilst in previous years the average annual increase in policies amounted to about 8,000 francs, in 1913 the increase from the figure for 1912 exceeded 17,000 francs.

During this same year, 110 claims for 45,081 francs, or 27 per cent. of the premiums, were paid off; this is the lowest percentage hitherto registered.

These satisfactory results are due to the reorganisation of the local agencies, and to the establishment of an inspectorate for the control of policies, the estimation of losses, and the payment of claims.

Nevertheless, the policy-holders, in spite of the fact that they pay 25 or 45 % less than the ordinary insurance rates, are not yet very numerous, being only about 10,000 of the 54,000 members of the *Boerenbond*.

The above particulars refer to 1913. For the previous years the reader can consult the following tables which give an idea of the growth of this action :

TABLE I. — *Long Term Insurance: Buildings, inclusive of Accessories.*

Year	Since Foundation		Current Year	
	Number of Policies	Amounts Insured	Net Premiums	Claims Paid
		Fr.	Fr.	Fr.
1903	153	726,562	415.74	—
1907	2,074	13,543,885	15,922.13	16,913.65
1908	9,691	53,723,575	56,276.56	37,445.51
1907	16,118	104,463,440	88,558.20	61,361.55
1912	25,874	219,422,684	148,062.92	53,653.72
1913	29,589	271,585,404	165,197.00	45,081.39

We shall now give the figures for short term insurance :

TABLE II. — *Short Term Insurance: Straw and Haystacks, etc.*

Years	Number of Policies	Insured Capital fr.
1900	471	450,116
1904	504	494,202
1908	529	666,763
1912	575	784,293
1913	614	1,079,909

Lastly, mention must be made of the Central Institution for Mutual Fire Insurance. This is not an institution for reinsuring, but it undertakes to invest the funds of the affiliated mutual insurance societies, to secure them credits and more especially to supervise their management and accounts. At the close of 1913, nine mutual societies were affiliated to it. Five of these affiliated societies required to open credits ; on the contrary, almost all of them closed their accounts with a surplus.

§ 2. INSURANCE OF LIVE-STOCK.

The insurance of live-stock is carried on in Belgium, as in most other countries, by mutual societies, here regulated by the act of June 23rd, 1894. In our Bulletin for May, 1913, we dealt with the various kinds of mutual societies for insuring live-stock, and we shall not here repeat what was then said. In that article we stated that the small mutual societies formed in rural communes have felt the need of centralising in provincial federations for the purpose of forming institutions for reinsurance to facilitate the payment of claims, re-establishing the equilibrium between those centres which have been more heavily affected and those which have been less so, by notably enlarging the number of risks dealt with. These reinsurance federations secure the funds for their work by means of subscriptions received from the federated societies, and with the assistance of the provinces and the Government. They indemnify the societies for a certain proportion of the losses sustained by their members.

The following are the data available in connection with the reinsurance institutes in the provinces of Brabant, Limbourg, and Antwerp:

Province of Brabant: (a) Federation for the Reinsurance of Horned Cattle.

- At the close of 1913, 110 local societies were affiliated to this Federation. They reinsured 26,079 head of livestock for the sum of 10,445,109 francs.

The Federation paid 885 claims for 42,189.85 francs. The premiums received amounted to 31,804 francs.

The following table gives some particulars on the growth of this Federation.

TABLE III. -- *Growth of the Federation of Brabant.*

Years	Number	Number	Number	Insured Value	Premiums	Claims	% of the Claims Paid Reinsured
	of Animals Insured	of Claims	of Claims %		Paid	Paid	
				Fr.	Fr.	Fr.	
1898	10,166	314	3.38	3,095,914	4,548.61	9,163.31	0.29
1901	16,170	621	3.84	4,954,005	14,800.34	30,316.24	0.61
1905	23,113	747	3.18	7,653,460	22,740.86	31,637.20	0.41
1909	25,224	838	3.32	8,877,322	26,865.90	39,117.55	0.44
1912	26,584	818	3.00	10,055,520	30,334.14	40,375.90	0.49
1913	26,079	885	3.20	10,445,109	31,804.51	42,189.85	0.49

The Federation of Brabant receives annually from the affiliated societies a fixed premium of 3 francs* for every 1,000 francs reinsured, and makes them a grant on claims equivalent to 30 per cent of the net loss.

(b) *Federation for the Reinsurance of Horses.* — On December 31st., 1913, there were 49 affiliated societies, which had reinsured 8,229 horses for 8,687,486 francs. The value of the premiums received amounted to 42,010 francs and the number of claims to 267 (3.23 %), for a value of 210,400 francs. The Institute for Reinsurance paid 63,800 francs in claims.

An enquiry made by the Federation into the causes of the death of the 267 horses showed that the most frequent causes of death are colic (21.7 %), enteritis (7.1 %), nervous lesions (7.4 %) and chest diseases (6.3 %).

The 8,229 horses reinsured as above fall into three age categories: the first including 3,361 horses (40.8 %) under 4 years of age; the second including 2,647 (32.1 %) from 4 to 10 years of age; and the third including 2,221 horses (27.1 %) over 10 years of age. Of the 267 horses that died during 1913, 66 (24.7 % of the claims) belonged to the first category; 86 (32.2 %) to the second, and 115 (43.1 %) to the third.

Province of Limbourg: (a) *Federation for the Reinsurance of Horned Cattle.* — 165 local mutual insurance societies belonged to this federation at the close of the last business year. They had insured 51,584 head for 20,172,355 francs. The Federation had to pay off 1,211 claims, for 477,545 francs; it contributed for this purpose the sum of 68,541 francs, equivalent to 30 % of the net loss.

(b) *Federation for the Reinsurance of Horses.* — At the date referred to, the St. Isidore Reinsurance Institute grouped together 31 societies, reinsuring 4,923 horses for 4,512,000 francs. It paid a sum of 53,817 francs on 208 claims, representing a total of 183,175 francs. The net loss amounted to 161,453 francs.

Province of Antwerp: (a) *Free Federation for the Reinsurance of Livestock.* — We have the following data on this federation at the close of 1913: affiliated societies, 67; head of livestock reinsured 23,682; claims entered 840; claims paid 50,261 francs. The balance-sheet showed a surplus of 17,376 francs, which brought the reserve fund up to 52,274 francs.

(b) *Free Federation for the Reinsurance of Goats and Sheep.* — Affiliated societies, 46; animals reinsured 6,245, estimated value 126,740 francs; claims paid 2,400 francs (on 395 claims) in the case of livestock insured for 7,950 francs.

§ 3. HAIL INSURANCE.

This branch of insurance is still in its infancy. As the *Boerenbond* was not in a position to take the initiative in founding a special institution for hail insurance for its members, it made an arrangement with a limited liability company, "La Confiance", one of the oldest and soundest French

companies, and secured from it special rates. On December 31st., 1913, 160 policies had already been taken out for an insured capital of 339,544 francs, with annual premiums amounting to 3,458 francs. The claims paid amounted to 1,813 francs.

§ 4. LIFE INSURANCE.

On December 31st., 1913, 53 life insurance policies had been taken out for an insured amount of 820,500 francs. The net premiums amounted to 28,375 francs.

The propaganda of the Boerenbond in favour of this form of insurance is now carried on essentially in the country districts.

Part III: Credit

FRANCE.

ORGANISATION AND WORK OF THE REAL ESTATE CREDIT SOCIETIES (*Continued*).

Now that we are acquainted with the laws of 1908 and 1912, we may consider the system of working of the Real Estate Credit Societies, the most important part of the subject.

§ 1. FORMATION OF CAPITAL.

(A) *Private Individuals*. — Generally some man of consideration, availing himself of his personal influence, heads the movement, and endeavours to recruit shareholders. As we have already shown, a society of this nature may be founded with a capital of 100,000 francs ; while it is sufficient if a quarter of this sum, that is 25,000 frs., be paid up. The provisional committee then sends to persons likely to join the new undertaking a form to be filled in, on which they must show the number of shares they will take.

The total amount of the capital required by the rules must be subscribed.

(B) *Savings Banks*. — Not only private individuals but public bodies also give pecuniary support. This support is so important that we must give the subject special consideration. Amongst such bodies, we include savings banks, benevolent societies, asylums, hospitals, and communes.

These various administrations share in the formation of the capital on the same terms as private individuals, with this difference, that the shares

subscribed by private persons need be paid up only to a quarter of their amount while those of collective bodies must be fully paid up.

Savings Banks may lend to the societies or subscribe shares or bonds. For the validity of the subscriptions agreements must be made between the banks and the society, formally establishing that the funds can not be affected in any way except by transactions for the benefit of persons fulfilling the conditions laid down in Art. 3 of the law of April 10th., 1908 amended by that of February 26th., 1912 (possession of a fifth of the purchase money, existence of a contract of insurance and a government certificate). The Savings Banks may devote to this purpose the half of their own capital; but the amount of these investments added to the net value of the mortgaged land must not exceed 70 % of the above mentioned capital.

The conditions of working of the credit societies, furnish every security for these investments. The difference between the rate of interest of 2 % required by the State on its advances and the rate of from 2 $\frac{1}{2}$ % to 3 $\frac{1}{2}$ % paid by the borrower will cover all the working expenses of the Society. The Savings banks may therefore fearlessly contribute to form the capital of the credit society.

It is even their interest to do so; they can make private mortgage loans under the same conditions as the credit societies, that is at 3 %. But it seems preferable that they should devote their available funds to the purchase of shares in real estate credit societies rather than employ them in private loans. M. Lardent-Becquerel has demonstrated this in making a comparison between the investment of 66,666.66 frs., by a bank in private mortgage loans and the same sum in subscription of two-thirds of the share capital of a real estate credit society.

Invested in private mortgage loans at 3 %, the sum of 66,666.66 frs. would yield 2,000 frs., scarcely allowing of 12 loans of 5,000 frs. each when the bank spends a fraction of the sum in advances of single life insurance premiums for the security of the loans. The cost of investigations and of the administration of the loans would have to be borne by the bank.

On the other hand, 66,666.66 frs. invested in a Credit Society having a share capital of 100,000 frs. will yield 2,000 frs. and will allow of 70 loans of 5,000 frs. guaranteed by life insurance, the single premium for which is advanced by the society. The operations of the society, under these conditions, after payment of a dividend of 3 %, will leave a net profit to the bank or private persons of 4,011.25 frs., which will serve to pay the cost of investigations and that of administration, and to form a reserve fund.

Thus in giving the support of 66,666 frs. to a Society, the bank will give it vitality; with the assistance of some private individuals the capital will be formed, and this, when invested, will yield interest and enable the Society to obtain a loan from the State of 402,500 frs.

We see that, with a fixed capital, a bank can grant only a limited number of mortgage loans, whilst a Credit Society with the same sum can make a considerably larger number of private loans. It is therefore evident that

in this way the savings banks have found a field of action which, while much more interesting, is at the same time much more profitable from the point of view of the bank, than the simple granting of mortgage loans to individuals.

It is always difficult for the founders of these societies to find the necessary capital, and not less difficult is it to pay for offices, at the start; one savings bank, by placing its rooms at the disposal of a society in formation and letting one of its employees act as clerk, considerably reduced the general expenses of the new society. We may say with M. Georges Risler, that the establishment in any locality of a credit society depends almost always on the attitude taken by the board of directors of a savings bank. The difference of 1 % in the rate between the money lent and that received by the society should be sufficient to pay the working expenses but only when a considerable number of loans has already been made; 300,000 frs. of capital lent to borrowers will bear interest to the amount of 3,000 frs. It is evident that in the first year of a new society its income will be quite insufficient, but, as the number of loans increases, the situation will be quite different.

The savings banks show more and more anxiety to subscribe to the formation of the capital of existing real estate credit societies, and to encourage the formation of other societies. At the beginning of 1913 this had been done by the banks of Besançon, Bordeaux, Dijon, Libourne, Amiens, Rheims, Boulogne-sur-Mer, Saint-Omer, Charleville, Voiron, Romans, Valence, Grenoble, Marseilles, Angoulême, Vienne, Coulommiers, Maubeuge, Nogent-sur-Seine, Blois and Saint-Dié; followed by the banks of Alais, Avignon, Nevers, Cambrai, Orange, Lunéville, Paris, Montpellier, Perpignan, Pont-à-Mousson, Rennes, Roubaix, Sens and Valenciennes.

Some of the banks in this list deserve special notice; at Lyons the bank itself founded the "Société Lyonnaise de Crédit Immobilier" and took shares to the value of 100,000 frs., gave it office room in its premises and gratuitously took charge of its accounts and of its management. A dozen other banks at once followed its example. At Besançon a real estate credit society was founded by the savings bank; it subscribed the capital to the extent of 35,500 frs., and induced various asylums and benevolent institutions to join the undertaking. The savings bank of Bordeaux in 1910 lent 27,500 frs. worth of bonds at 3.25 %, thus enabling the Bordeaux-Society to subscribe shares, to the amount of 110,000 frs. in the credit society in course of formation. At Dijon the capital of the real estate credit society was formed in part by the savings bank which took paid up shares to the value of 50,000 frs. At Amiens, the Savings Bank completed the capital of the Credit Society with 50,000 frs. At Paris, the Savings Bank gave premises to the Credit Society as also did the banks at Coulommiers, Blois, Rheims, Grenoble, Vienne, Nogent-sur-Seine, Sens, Valenciennes, Alais, Nevers, and Voiron.

The sums invested by the savings banks to form the capital of several real estate credit societies may be estimated altogether at about a million frs.

(C) *Public Benevolent Institutions.* — Charitable and benevolent institutions, asylums, hospitals etc. may appropriate to the work of providing cheap dwellings, and consequently to the establishment of real estate credit societies, a sum equal to 2/5ths. of the available portion of their capital.

Certain formalities are required for such appropriation. Savings banks have no need for any authorisation for such transactions, but public benevolent institutions must be authorised by the Prefect. Shares taken must be entirely paid up, and their total value must not exceed 2/3rds. of the share capital of the society to which they give support.

Amongst the shareholders in real estate credit societies, the charity bureau and asylums of Besançon and of Sens, the charity bureau of Bordeaux and the asylums of Dijon, Nancy, Valence, Boulogne-sur-Mer and St. Étienne must be mentioned. At Besançon in 1912 the Government Asylum Commission subscribed 67 shares of 500 frs. each in the "Besançon Real Estate Credit and Small Holdings Encouragement Society" of that city, and the charity bureau likewise took 61 shares in the same society.

At Nancy, the asylums aided in the establishment of the real estate credit society of Meurthe-et-Moselle by taking 60 shares. At Dijon the hospital contributed 20,000 frs.

(D) *Communes and Departments.* — These may take bonds or shares on the condition of their being fully paid up, and not exceeding the total value of 2/3rds. of the share capital. The approval of the Labour Minister is necessary after that of the Permanent Committee of the Superior Council for Cheap Dwelling Houses.

Communes and departments may guarantee even up to the maximum of 3 % interest on the bonds of these societies, and also guarantee for twenty years, at most the dividends on their shares. Later, when the Society is working, loans of funds and the subscription of bonds will be permitted to them.

At Rouen the municipal council decided, on April 27th., 1912 to take part in the founding of a real estate credit society by subscribing 500 shares of 500 frs. each. That of Lille followed, on March 18th., 1913, in the same steps, subscribing 400,000 frs. worth of shares.

The department of Pyrénées-Orientales took 10 shares of 100 frs. per share in the real estate credit society; Calvados took 1,000 shares of 100 frs. each in the real estate credit society of Caen. As to the departments that guarantee, we may mention the department of Nord guarantee for the societies of Lille, Maubeuge, Dunkerque and Douai, and the department of Pas-de-Calais for the society of Arras, those of Somme and finally of Seine for the Central Society and the Society of the Ile-de-France,

§ 2. FORMALITIES IN CONNECTION WITH THE CONSTITUTION OF A SOCIETY.

Let us suppose that capital has been found for a real estate credit society. The 25,000 francs have been paid and the rest subscribed; still important formalities remain to be completed.

First of all the founders in a preliminary meeting draw up and consider the rules to be adopted. On the advice of the Superior Council for Cheap Dwellings, the Labour Minister has drawn up model rules which are being increasingly adopted by societies in formation which profit by previous experience and apply rules which are the result of practical studies.

In the rules the object of the society must be clearly defined :

" To enable borrowers fulfilling the conditions laid down by the law of April 10th., 1908, and amended by that of February 26th., 1912, to contract individual mortgage loans for the purchase of fields or gardens under the law or for the purchase or erection of private houses at small cost and to make advances to societies authorised by the law to contract loans ". The amount of the share capital shall be fixed, as well as the interest on loans or advances. Provision shall be made in regard to ownership of shares, the investment of available funds, the formation of a Board of Management, and its powers, the general meetings, and the dissolution of the society.

Of these rules four copies must be made on unstamped paper, and signed by the founders, one for the society, one for its notary, and the other two to be placed in the record offices of the tribunal of commerce and of the justice of the peace.

The entire subscription of the capital, and the compulsory payments must be proved in the presence of a notary.

Three copies, signed by a notary, must be made and consigned to the society and to the record offices of the tribunal of commerce and of the justice of the peace for the formalities of publication, after which the General Meeting may be called.

In this first and very important meeting the Managers and Committee of Supervision must be appointed, and the rules must be approved. The managers must each possess shares to the amount at least of 500 francs ; their functions which refer to the management and administration of the society are very extensive and all gratuitous. The committee of supervision must see that the rules of the society are carried out ; it audits the accounts and makes an annual report to the general meeting.

But by these arrangements alone the society is not fully constituted ; publication is necessary. This formality consists in the registration of the report of the Meeting, the deposit at the offices of the tribunal of commerce and the justice of the peace (together with the copies of deeds above mentioned) of the list of shareholders, and the publication in a journal of legal information of an extract from the rules and documents. No other publication is required unless an appeal has been made to the public to take shares.

Nothing remains but to obtain from the Labour Minister his approval of the society ; a request may be sent to him for consideration before other formalities are complete, as soon as the rules are adopted, but approval can not be given till after the society is constituted.

The approval is given in the form of a decree after consultation with the Finance Minister and the Superior Council for Cheap Dwelling Houses

It must be added that all the documents required for the constitution of the society are exempted from stamp duty and they are registered gratis even before the approval of the Labour Minister is given; they may be written on unstamped paper; the shares and bonds are also exempt from stamp duty and license and income tax; they only pay $\frac{3}{4}\%$ transfer duty and the certificates must be entered in a counterfoil register.

The society is definitely constituted after the approval of its rules.

§ 3. THE SOCIETY IN ITS RELATION TO THE STATE.

As soon as the rules have been approved, nearly the whole of the capital paid by the shareholders is lodged in the Deposit and Consignment Bank by which it is invested in Government securities and in railway bonds. Thus this capital yields interest from the beginning at $3\frac{1}{2}\%$ ensuring a sufficient income to the shareholders on the funds advanced by them even before any loan has been granted. The certificates must be lodged in the bank and serve as a guarantee for advances made by the State.

The Deposit and Consignment Bank accepts the available funds of real estate credit societies as well as the Government and other securities belonging to them. A deposit account is therefore opened, and interest at the rate of 4 % per ann. paid on the deposits. The credit societies may only deposit Government revenue securities or Government guaranteed railway shares and bonds. The general cashier of the bank receives the amounts in arrear and interest. One observation must be made as regards the withdrawal of money; the loans granted by the State will be according to the amount of the funds deposited, and therefore withdrawal can only be authorised as far as the amount borrowed by the society will permit.

This is the guarantee on which the State relies when it grants advances to credit societies. To protect itself against risk the State requires that these loans should be secured in three ways, by the share capital of the societies, the value of the landed property on which the mortgage loans are guaranteed, and the borrowers' life insurance policies.

We have already indicated the bases of these guarantees in our summary of the law and its modifications; so we now pass on rapidly.

A society desiring a first advance from the State at 2 % must send to the director of the deposit and consignment bank a request, together with the following documents. — two copies of the rules of the society with a statement of the ministerial approval, a list of the members of the Board of Management and of the Committee of Supervision, a list of the subscribers with the amount paid and the number of shares possessed by each, the balance sheets for the last three years with the reports of the general meetings at which they were drawn up, a detailed statement of revenue and expenditure since the foundation of the society, a report of its working and its financial position and a detailed statement of its transactions, particulars in regard to its power of contracting loans.

All the papers are then sent to the Labour Minister, by whom they are laid before the Loan Commission.

This Commission must fix the amount of each loan, taking into account the minimum security to be obtained by the investment of successive receipts. In other words it must examine into the society's power of borrowing at the start before opening with it a credit account.

Take for instance a society founded with a capital of 100,000 francs; the first quarter, that is 25,000 francs only has been paid up; 75,000 francs remain due. It must not be forgotten that it is only by means of an advance from the State that the society can effect its loans, as the share capital is immobilised in the securities in deposit.

The amount of the maximum loan to be obtained from the beginning of the working of the society is fixed in the following manner:

(1) Half the capital not paid up, namely 37,500 francs;

(2) The amount of the Government and other securities belonging to the society, and lodged in the Deposit and Consignment Bank. This is the paid up capital, namely 25,000 francs.

(3) First mortgage credits, up to $\frac{6}{10}$ ths. at most of the purchase money or the net value of the landed property on which they are guaranteed. M. Lardeur-Becquerel shows us how this calculation is made: the borrowers must be possessed of $\frac{2}{10}$ ths. of the price of the land or houses; the society then advances $\frac{4}{10}$ ths., but, as the loans only enter in to the calculation of the borrowing power up to $\frac{6}{10}$ ths. of the price of the mortgaged property, the difference to be made up by the credit society consists of that part of the State loan corresponding with half the unpaid up capital added to the paid up capital, namely 37,500 + 25,000 frs., amounting to 62,500 frs. This sum representing $\frac{2}{10}$ ths. of the value of the landed property, its

total value is therefore $\frac{62,500 \times 10}{2}$ or 312,500 frs. Taking $\frac{6}{10}$ ths. of this sum, the credits are shown to be 187,500 francs.

(4) The premium life insurance reserve for which the society has advanced premiums; for the first year this reserve has no existence and its place is taken by the single premium of the policies. For the society in question this reserve may be estimated at 15 % of the mortgage loans with which the policies are incorporated, viz. 37,500 frs.

It is only necessary to add together these various constituents parts of the borrowing power to obtain the amount of the loan at 2 % which the State may grant to the society. In the instance we have taken this loan amounts to 287,500 frs.

With the guarantee of the department or the communes this sum may be considerably increased. In fact the State is authorised to advance $\frac{7}{10}$ ths. (instead of $\frac{6}{10}$ ths.) of the value of the real estate on which a first mortgage is guaranteed, if the department or commune guarantee the payment of yearly sums corresponding with this supplementary increase of $\frac{1}{10}$ th. The borrower must furnish a contribution of $\frac{2}{10}$ ths., reducing the sum paid by the society to $\frac{1}{10}$ th., the advance by the State of a supplementary

tenth reduces by one half the contribution of the society, enabling it to assist a double number of borrowers.

Returning to the above example, the portion of the loan granted to the society corresponding with half the unpaid capital added to the paid up capital (62,500) simply represents $\frac{1}{10}$ th. of the value of the land or house on which the credits of the society are secured.

We have as before:

Half the unpaid capital	37,500
Amount of securities deposited	25,000
$\frac{1}{10}$ ths. of the price of the mortgaged property	
(the total value of which is $\frac{62,500 \times 10}{1}$)	
or (625,000)	437,500
Premium reserve	75,000
Total	575,000 frs.

Thus through this guarantee the State loan will amount to 575,000 frs. It has been shown that the value of landed property on which the society has mortgages amounts to 625,000 frs.; the commune or department only guarantees $\frac{1}{10}$ th. or 62,500 frs.; to arrive at this important result of doubling the State advance it is only necessary to insert in the communal or departmental estimates a contingent credit of 3,201.25 frs. each year so as to pay the amount of 62,500 frs. in 25 years with 2 % interest. Risks are in reality non-existent. In fact the guarantee of the department or commune cannot be claimed unless the society is unable to pay its debts to the State, a circumstance which could not occur unless it had lost the paid-up portion of its capital as well as the part remaining due from the shareholders, since in case of financial embarrassments the society can always count on three-fourths of its capital still due from the shareholders.

The society having now at its disposal a first advance of 575,000 frs. soon receives new requests for loans. When this fund is exhausted the State will make further advances calculated in the following way:

In its first year of working the society may meet the payment of 2 % interest due to the State, and liquidate a part of the loan through the payment by the borrowers of a first instalment in the form of interest and repayment of the capital. The debt of the society to the State will thus be diminished by so much. The total amount due by the society ought then to be at least equal to the total amount remaining to be paid off on the loans granted by the State. The amount still due to the society is calculated by adding together the paid up capital, half the capital not paid, the credits on first mortgage up to $\frac{1}{10}$ th. (or $\frac{1}{10}$ ths.) of the value of the real estate and the premium reserve. The difference between this sum and the total amount still due to the State on previous loans is calculated. The result obtained will represent a sum again available which may again be lent to the society.

represents $\frac{1}{10}$ ths. of the value of the real estate on the security of which the society may contract new loans.

The maximum of the new advance will be then determined as follows : the difference between the borrowing power of the society and the sums owed by it to the State, $\frac{1}{10}$ ths. or $\frac{2}{10}$ ths. of the price of the land or houses which serve as security for new loans and the premium reserve in connection with new insurance policies.

Thus from the second year, a new loan of 42,400 frs. may be obtained, and at the end of its twentieth year, the society, founded with a capital of 100,000 frs., of which only 25,000 had been paid up, will have obtained from the State loans amounting to 2,464,000 frs.

The borrowing power of real estate credit societies is therefore practically unlimited, and not likely to be arrested by the want of funds. Furthermore, their financial condition is excellent, because, for a society guaranteed by the department or communes, the net profit at the end of the first year will be 5,387 frs. for the payment of the general expenses and the increase of the reserve fund. This profit will increase in proportion as business extends, and this increase will be as rapid as that of the advances made by the State.

The extent of the borrowing power of a society once fixed, the National Old Age Pension Fund must negotiate the amount for the account of the State. The granting of this loan gives occasion for a Government contract between the Pension Fund and the borrowing society, in which all the conditions respecting the amount of the loan, its grant and repayment are established.

As soon as the contract is signed the funds are placed at the disposal of the borrowing society, not, however, all at once, but in successive instalments, according to the requirements of the society on proof of its due investment. The amount will be paid at the General Treasury or at the Office of the of Tax Collection.

Every request for funds made by the society must be accompanied by an estimate of the expenses to be defrayed by means of the loan, and a proof of the manner in which the funds already received have been employed.

The Pension Fund, before making advances, takes precautions still further to ensure the safety of the investment ; thus all the houses on which money is lent must be insured against fire ; the Fund must have the power of inspecting at any time the books and accounts of the society ; cheap dwelling house societies to which credit societies might advance money, must transfer the profits of insurance in connection with such loans to the real estate credit society and also it must be made impossible legally to replevy in the case of the mortgage loans without the previous sanction of the credit society.

In order to keep itself at all times informed in regard to the condition of the credit society, the Pension Fund requires from it an annual statement of its transactions, showing the amount due in capital on every individual loan, as well as on the advances made to societies. The reports of the general

and special meetings, the balance sheets and profit and loss accounts must also be sent to the Pension Fund.

Two days in the year are fixed for the repayment of State loans: March 31st. and September 30th.; the amount to be repaid is shown in an amortisation table, drawn up half-yearly by the National Pension Fund. It is essential that the payments to be made by the society on the sums advanced by the State should agree with similar payments made by borrowers on mortgages. Therefore, the amortisation table is established in accordance with the conditions of repayment of these individual loans.

The amount to be repaid is announced by the Deposit Bank to the societies whenever it falls due. The society may at the same dates make further payments in advance.

The repayment of that portion of the capital which is still due may be exacted at once in the case of the withdrawal of the Ministerial approval from the society, on account of irregularities, its dissolution or its having borrowed money from the Bank without authorisation within the period for repayment. If the annual instalments have not been paid within the year or if the evidence of proper investment required by the contract has not been produced, payment may be exacted one month after due notice has been given.

There are two important rules to be observed with regard to repayment: in the first place the total amount still due to the credit society, whether from mortgagers or dwelling house societies, should at least be equal to the total amount of the sum still due on loans granted by the State. If it is less, the difference must be paid to the Pension Fund, to be devoted to the repayment in advance of sums lent by it. Hence the second rule; for every advance granted by the credit society to a dwelling house society, the whole amount due to the latter on individual mortgage loans should at no time be less than the amount still due to the real estate credit society.

These are the rules to be followed as to the repayment of capital. The interest on these advances is, as we have said, calculated at the rate of 2 % per annum, payable on March 31st. and September 30th. of each year. This rate will be calculated on the amount still remaining due. Supplementary interest or interest on arrears of payment may be charged if the society has not made the required repayments within a month after they fall due. Such interest is calculated at 4 % from the day when payment was due.

If this penalty be insufficient, and neither debt nor interest on arrears is repaid within three months, the legal representative of the Treasury will take proceedings for the recovery of the money.

The payment of all these sums, capital, interest and interest on arrears, is made in Paris at the Deposit and Consignment Bank, but the society, by application to the director of the Bank, may be authorised to make the payments to the tax collector of the district.

Nothing more need be said as to the grants of money required by a real estate credit society for effecting its purposes; we now pass on to the destination of such sums.

§ 4. THE SOCIETY IN RELATION TO PRIVATE BORROWERS.

The granting of loans to persons of small means forms the chief part, it is not the whole of the business of a real estate credit society. In fact cheap dwelling house, co-operative and mutual aid societies, and associations recognised as of public utility may all have recourse to the real estate credit society for transactions authorised by the law on cheap dwelling house societies. We shall begin by the consideration of loans to needy persons, and seek in turn, a reply to the following questions: why do we recourse to real estate credit societies? what are the conditions required for borrowers? what formalities are required before a loan is granted? how and at what rate will it be calculated? and how will its repayment be effected?

(A) *Means by which a Loan may be Obtained from a Land Credit Society.* — The reasons for borrowing are numerous. Purchase of a house already built; repairs or improvement of a house already built; building of a house or purchase of land, fields or gardens. For each loan a maximum amount is fixed which cannot be exceeded, and the loan depends on the observance of this rule, as we are about to show.

(B) *Conditions Required from Borrowers.* — These conditions may be grouped under three principal heads: profession and physical aptitude, contribution, and the value of the house or land in question.

(1) In the first place, the borrower must be a person of *small means*, that is, that the savings he has made must be insufficient for the purchase of the real estate. In practice, the borrower is generally a town workman, an agricultural labourer, a clerk or employee. Any one whose personal fortune is sufficient without State help has no claim to a loan from the real estate credit society.

The borrower must be of age legally and able to borrow and mortgage. The importance of this condition is evident, for loan and mortgage form the basis of all real estate credit business. The borrower must also be in good health, be able to cultivate the land himself (if desiring land); if not in good health, the National Insurance Society will not consent to insure his life, and the society would therefore refuse to grant him a loan. In default of a promise to cultivate the land personally, he must engage that it will be done by members of his family, but the necessity for good health remains unchanged. The age of the borrower must be less than sixty years.

(2) The personal participation of a borrower is shown by his contributing a small amount of capital and insuring his life.

He must possess $\frac{2}{10}$ ths. of the value of the property in connection with which the loan is to be made. When this is a field, $\frac{2}{10}$ ths. of the price of the land is necessary; when the loan is for the purchase or building of a house he must possess $\frac{2}{10}$ ths. of the value of the ground and of the building united. His contribution is not a fixed and unchangeable sum. The necessary investigations, circumstances, site, plans and estimates of the projected house

may induce the society to require of the borrower a personal contribution or a new guarantee exceeding one fifth of the amount to be spent. On the other hand, his contribution of $\frac{2}{10}$ ths. is not necessarily made in money; the law accepts as guarantee ground free of mortgage and of value corresponding to $\frac{2}{10}$ ths. of the total.

Besides the obligation of this contribution, the borrower must take out a single premium life insurance with the Insurance Society as security for the payment of eventual instalments still due at his death. The importance of this insurance is easily understood; for it gives the borrower the certainty that, in case of his premature death before all monthly payments have been made, his wife and children will have the house without having to pay anything more, the balance due being paid by the National Insurance Society. The borrower having but limited means, it seemed hard that he should be obliged to pay the insurance premium himself; therefore the Society advances the premium, incorporating the amount in the loan and only very slightly increasing the amount of the monthly instalment. The expense of insurance, is thus equally divided over the whole period of the duration of the debt.

The National Insurance Society is, in case of death, guaranteed by the State. It is managed by the Deposit and Consignment Bank and an applicant must ask the General Director of that Bank to arrange for his medical examination. In his application, the borrower engages to reply to all questions the doctor may ask and to submit to the examination. The real estate credit society undertakes to transmit the demand to the Deposit Bank. A short time after this the applicant is informed that he may present himself to the doctor charged to undertake the examination. The doctor sends his report to the Deposit Bank, which decides in the last resort whether the man may be insured or not. In case of refusal, the borrower is informed of it, but without being told the reasons. In case of acceptance, he is informed of it by the secretary of the Credit Society.

With a view to relieve the applicant from the expense of the medical visit, the law stipulates that it may be dispensed with in the case of an intending mortgager, if at least two years previously to the proposed acquisition of the house, field or garden he has applied to the National Society for insurance. In such a case, he must pay a sum equal to 1 % of the capital to be guaranteed, but not less than 10 frs.

In either case, when the risk is accepted, the Society making the loan requires the borrower to sign an application to the Deposit Bank for insurance. In this application he must state that he has successfully passed the medical examination, or obtained a promise of insurance, and that he possesses a fifth, at least, of the price of the land or house he wishes to buy. With the application he must send the following documents:— certificate of birth, extract from the contract of his mortgage loan with declaration of its amount, the rate of interest, terms, and conditions for repayment. Government certificate in accordance with the law of April 10th.,

125 (to be spoken of later), and, in case the loan is for a house, a certificate of its salubrity.

After the receipt of the application by the Bank, the contract will come into force as a fixed date, and the borrower will immediately receive a copy of the deed. The payment of premiums will be effected by the credit society benefiting by the insurance. There may be a case in which through the cancelling of the loan contract, or through the anticipated payment of his debts by the insured person, the insurance becomes useless; the policy may then be cancelled and an amount equal to the actual value of the premium reserve will be reimbursed. When the death of the insured person is due to suicide, a duel or judicial condemnation, the policy becomes void and the premiums paid up are returned to the heirs.

(C) *Conditions regarding the Value of the Houses or Land.* - We must distinguish between loans for the purchase or building of houses, and those for the purchase of land. In both cases there is a maximum established which must not be exceeded; this is a maximum value fixed by law and varying according to the population of the commune, or a maximum of area together with an invariable maximum of value. In either case, the loans must not exceed $\frac{1}{3}$ ths. of the value fixed.

(1) When the loan is for a house the question of the maximum rental value is easily solved for each commune; for tenement houses it is only necessary to conform to the adjoining table; which we have reproduced from M. Bernard d'Avont's thesis; for self contained houses the rent is increased by one-fifth, the price of quarters in them being obviously higher.

As to the rental value of each lodging, it is fixed for tenement houses according to the rent shown in the lease, increased by any burdens on the real estate besides those for salubrity and fire or life insurance. For a self contained house, the rental value is established at the rate of $4\frac{3}{4}\%$ of the net cost of the ground on which they stand, measured to the outermost extremity of the walls. The price of water pipes and drainage pipes is calculated only from where they enter the outer wall of the house. Proprietors may test the accuracy of such valuation by producing contracts, estimates, bills etc.

The house must be insured against risks of fire in an insurance company approved by the Society for the period of the duration of the loan, and for a sum equal to the value of the building. And to insure the claims of the Society in case of casualty, the borrower engages to maintain and renew this insurance until the entire loan is repaid. He cannot reduce the amount or cancel the contract without the consent of the Society. Trade in drinks must not be carried on in the house, and, finally, it must not be let or sold without the authorisation of the Society until the debt is fully paid off, in order that the Society may not lose its mortgage security.

(2) In the case of a plot of ground, a field or a garden the price must not exceed 1,200 frs., including the burdens on the land and the area of one hectare. The above conditions must be united. If a house is to be built on the ground the rental value must be added, yet if the building have

a garden attached of an area not exceeding 10 ares, the value of the land is not limited.

If the borrower has already a house, and he wishes to join to it a garden or field, he must again prove that the rent of his house during the year preceding his demand has not been above the maximum rental value used in the Commune.

The borrower must engage to cultivate the field himself or have it cultivated by members of his family.

He must not be proprietor of a plot built on or not built on, one hectare in area, or of a value above 1,200 frs. If he already has a plot of extent and value will be deducted from the above figures.

(D) *Formalities Necessary for the Obtaining of a Loan.* — All these conditions being fulfilled, the Credit Society takes the necessary steps to obtain a Government certificate and a certificate of salubrity. The first is always useful in the case of either a house or a plot of ground; the second is useful only in case of demands for a loan for the purchase, or building of a house.

Table of Maximum Rental Values.

Category	Lodgings of 3 or more. Dwelling rooms of 9 square me- tres with W. C. and kitchen	Lodgings of 2 Dwelling rooms of 9 square me- tres with W. C. and kitchen	Lodgings of one Dwelling room of 9 square me- tres with kitchen	Lodgings of one Dwelling room only of 9 square metres
Communes of under 500 souls.	Rent of lodgings in tenement houses	220	180	120
	Rent of self contained houses	264	210	144
	Maximum price of a self con- tained house	5,557	4,547	3,031
	Maximum price of a self con- tained house	1,708		
Communes of from 500 to 5,000 souls.	Rent of lodgings in tenement houses	250	205	125
	Rent of self contained houses	300	240	150
	Maximum price of a self con- tained house	6,315	5,178	3,157
	Maximum price of a self con- tained house	2,020		
Communes of from 5,000 to 15,000 souls.	Rent of lodgings in tenement houses	275	225	150
	Rent of self contained houses	350	270	180
	Maximum price of a self con- tained house	6,947	5,684	3,780
	Maximum price of a self con- tained house	2,473		
Communes of from 15,000 to 30,000 souls.	Rent of lodgings in tenement houses	325	250	175
	Rent of self contained houses	390	300	210
	Maximum price of a self con- tained house	8,210	6,315	3,157
	Maximum price of a self con- tained house	2,520		
Suburbs of communes of from 30,001 to 100,000 souls within a radius of 10 kilo- metres.	Rent of lodgings in tenement houses	400	325	250
	Rent of self contained houses	480	390	300
	Maximum price of a self con- tained house	10,105	8,210	6,315
	Maximum price of a self con- tained house	3,157		
Communes of from 100,000 to 200,000 souls.	Rent of lodgings in tenement houses	500	400	300
	Rent of self contained houses	600	480	360
	Maximum price of a self con- tained house	12,631	10,105	7,579
	Maximum price of a self con- tained house	4,421		
Suburbs of communes of 200,000 souls and upwards within a radius of 15 kilo- metres. Large sub- urbs of Paris.	Rent of lodgings in tenement houses	600	500	350
	Rent of self contained houses	720	600	420
	Maximum price of a self con- tained house	15,157	12,631	8,842
	Maximum price of a self con- tained house	5,952		

The Government certificate shows that the conditions are satisfied as already indicated: -- for purchase of a field or garden, area not to exceed one hectare, rental value of lodging, maximum purchase price, engagement to cultivate; for the purchase or building of a house, all conditions connected with rental values as established by law. The certificate is delivered by the superintendent of direct taxation of the district in which the house or land is situated.

A certificate of salubrity is given by the Patronage Committee for Cheap Dwelling Houses within three months after application has been made for it in the district in which the house stands; to save time a provisional certificate, given by a delegate appointed by the Committee in each district, will authorise the loan. The definite certificate gives a right to exemption from taxes (1). In order to obtain these fiscal privileges the borrower must make a declaration at the town hall or the commune respecting the nature of the building he proposes to erect. For this he will receive an acknowledgement to be forwarded to the society, which will then send the certificate of exemption from taxes to the superintendent of direct taxation.

Meantime the borrower addresses to the real credit society his request for a mortgage loan, giving his full name, the place and date of his birth, his residence, his trade, his income, stating whether he is married or single and whether he has children or not; he names the sum he wishes to borrow and fixes a term within which he proposes to repay the loan; he describes the situation of the land on which he proposes to build or the house he wishes to buy, he specifies the area of the ground covered or to be covered and its price, and the amount of the net cost price.

From the answer given by the society the borrower knows beforehand what sum he must have immediately available, what sum will be lent him by the society, the amount of the single insurance premium advanced by the society and what he must pay a month so that he may be free of the debt within a given time.

When the society has given a favourable answer, the borrower must undergo a medical examination; when accepted for insurance he must supply the following documents required for the drawing up of the loan contract: certificate of birth on unstamped paper; contract of marriage if there is one, if not copy of the marriage certificate, particulars of family, title deeds of land, savings bank book or evidence to show that he possesses at least the required fifth; if he proposes to buy a house already built he must

(1) It should be added that the patronage committees retain the right of visiting cheap dwelling houses to assure themselves that the state of salubrity is maintained; they may withdraw the certificate if the condition of the dwelling justifies them in doing so, but in this case their decision must be notified to the proprietor, who is allowed a month in which to appeal to the Labour Minister, and the certificate will not be withdrawn unless the insalubrity is due to alterations in the arrangements of the house. The committees will submit to the Labour Minister for approval conditions the buildings must satisfy before certificates are granted.

produce the promise to sell, or a letter from a notary or from the proprietor indicating the price and the charges on the house, the land tax certificate for the preceding year, the fire insurance policy and the contract of lease, if there is one; if he intends to build a house he must produce a plan of the ground with the exact position of the house, a plan of the house with description and estimate, establishing the cost price, and the contract signed by both builder and borrower.

The Board of Management of the society then examines all the papers and decides on its action; according to the information given, to the situation of the ground, to the plans and estimates for the house, it may refuse the loan or require from the borrower a supplementary guarantee in excess of the obligatory fifth. Nothing remains but to draw up the loan contract, and to call the borrower before the notary for signature.

(E) *Grant of the Loan.* -- The loan may be granted in one of two ways, either as an ordinary loan or by opening a credit account. The first is usual in the case of purchase of ground or of a house already built; the whole sum is placed by the society in the hands of the notary who conducts the sale. But, when a house is to be built, a credit account is opened; the money is not handed directly to the borrower, but temporarily placed in the society's safe, and advanced as required to the builders in charge of the works; the last tenth must be paid when the house is completely finished and occupied by the borrowers.

In this case a credit account is opened before a notary between the lender and the borrower. The presence of a notary is indispensable because of the constitution of the mortgage. The society's mortgage must be given preference and be regarded as a first mortgage; no preference or any other mortgage may take precedence of it.

In the deed the society declares that it has opened a credit account to a certain amount with the borrower, with a view to the building of a house or the purchase of land or a house, and with the view to payment of a premium of insurance. The borrower on his part acknowledges that he owes to the society a fixed sum bearing interest.

It is plain that this opening of a credit account involves the payment of interest by the borrower; the rate on loans to private individuals must not exceed $3\frac{1}{2}\%$ and certain societies, such as the cheap dwelling house society of Seine-et-Oise content themselves with only 3% . The difference between the rate of 2% , at which the societies borrow from the State, and that of $3\frac{1}{2}\%$, at which they lend to private persons, is a considerable source of income for them: on 100,000 frs. the society thus makes 1,500 frs. profit; with increased business, and making 200 loans of 5,000 frs. each it will gain 15,000 frs., more than sufficient to cover its general expenses.

(F) *Repayment of the Loan.* -- The borrower fixes the date of repayment, subject however to certain limitations. The time allowed must not exceed 25 years and the whole must be repaid by the time that the borrower attains the age of 65. Repayment may be made in 5, 10, 15, 20 or 25 years; a man of 40 may be allowed 25 years, but a man of 55 must pay all within 10 years. Payment is generally made in monthly instalments; they may

also be quarterly or even annual, and are so calculated as to pay off at once the capital borrowed, the insurance premium and the interest. Borrowers are not obliged to pay a fixed sum every year; their monthly payments may exceed the minimum fixed, but they must not make larger payments in order to postpone future payments or to reduce them below the minimum stipulated. Borrowers may even pay the whole sum in advance, in which case the insurance policy is cancelled at the date of next maturity and a sum equal to the premium reserve at that date is paid to the borrower.

At the time of paying his first monthly instalment each borrower receives a pass book in which are entered the conditions of the loan, the amount of money advanced by the society and particulars of the payments made by himself. Every December these books are sent to the society for the calculation of interest and balancing of the account; the sum due is added to the year's interest, payments made are deducted and the balance carried forward. Thus a workman may himself check the accounts of the society and ascertain the decrease of his debt in proportion to the amount of his payments.

Repayment of loans may in the following cases be exacted at once: if two monthly instalments have not been paid, or if a demand for payment receives no attention for eight days, if a tax has been imposed on the capital or interest of the credit, if the mortgage is not a first mortgage, if the property mortgaged has been distrained or divided, deteriorated or neglected, transformed or used for the sale of alcoholic liquors, if the debtor lets the holding before total repayment, and without the authorisation of the society, if the house is not built at the date fixed and in accordance with the plans and estimates submitted to the society (1); if any clause in the loan contract has been violated, or if the life insurance has been annulled or cancelled for any reason whatever. Power to exact payment is conferred by the mere fact of the occurrence of one of these cases; the society may then claim from the insurance society the value of the life insurance policy.

§ 5 THE CREDIT SOCIETY IN ITS RELATION TO CHEAP DWELLING HOUSE SOCIETIES.

Mortgage loans to individuals constitute the chief part of the transactions of real estate credit societies, but they may also advance money to cheap dwelling house societies, co-operative or otherwise.

(A) *Advances to Cheap Dwelling House Societies.* — As a general rule authorised cheap dwelling house societies under any form, provided that their transactions come within the limits of the law, may borrow money

(1) Eventually the real estate may be altered or increased without loss of the legal advantages, on condition that the resulting expenses do not exceed by more than one tenth the legal maximum prevailing in the commune where the real estate is situated.

from real estate credit societies, not however to be invested directly but to be passed on as mortgage loans to individuals.

The rate of interest on loans from real estate credit societies to cheap dwelling house societies is fixed by the decree of May 3rd., 1913: it must not exceed 3%. In practice, these societies only exceptionally engage in mortgage credit transactions.

(B) *Advances to Co-operative Cheap Dwelling House Societies.*—In view of the fact that, though pursuing different methods, real estate credit societies and co-operative cheap dwelling house societies are working for the same object, that of the acquisition of real estate by persons of small means, the law of December 23rd., 1912 decides that both shall be under the same regulations. These co-operative societies may therefore have the benefit of loans from the State, at the reduced rate of interest of 2%, for transactions in conformity with the law, provided that they satisfy the following conditions:

Their share capital must not be less than 25,000 frs. paid up, and, for greater security for the annual payments by instalments of the loan, the guarantee of a solvent person or that of the commune or department must be obtained. Advances are made for individual mortgage loans, or for the erection of self contained houses to be let and eventually sold. The shareholders of the co-operative society must pay one fifth on their shares, representing the value of the land allotted to them; they must also take out a temporary life insurance policy, and obtain a Government certificate declaring that they comply with the conditions prescribed by the law; the co-operative society receives a mortgage on the land or building for which the loan was granted.

The power of borrowing is slightly restricted; the half of the capital which is still unpaid cannot be security for it, because the capital of co-operative societies is essentially variable; nor can the credit on the first mortgage up to $\frac{4}{10}$ ths. of the purchase money, because in co-operative societies holders of mortgage loans cannot become proprietors till their shares are all paid up. The amount of the loans is calculated according to the amount of the Government or Government guaranteed securities belonging to the society and deposited in the Deposit and Consignment Bank, the premium life insurance reserve, where the society has advanced premiums, $\frac{7}{10}$ ths. of the purchase money or the cost price of the real estate, at least one fifth of which is represented by the payment of shares subscribed. The real estate is mortgaged for the benefit of the commune or department.

All these conditions having been satisfied, the State will grant loans directly as to the real estate credit societies. But this is not the only way in which the co-operative societies can raise money; another means was given to them by the law of December 23rd., 1912.

By this law, real estate credit societies may grant loans to co-operative societies with a view to the purchase of fields or gardens, and the purchase of erection of cheap dwellings; these loans may enable co-operative societies themselves to build private houses for those of their members who possess

one-fifth of the value of the land or house, whose lives are insured, who possess Government certificates, and can produce, if necessary, a certificate of salubrity. But the loans must not exceed four-fifths of the value of the real estate allotted to the members.

Under the same circumstances, the real estate credit societies may grant mortgage loans to co-operative societies for their business of loans with promise of sale, provided the value of the real estate is represented by at least one-fifth of the paid-up shares.

Lastly it has been asked whether credit societies might not give the assistance in increasing the value of a tenement house. A favourable decision was given by the law of December 23rd., 1912, at least in the case of tenement houses for numerous families. Real estate credit societies may in the third place lend to co-operative societies desiring to purchase or build tenement houses if the following two conditions are satisfied: 1. that the shareholders in the co-operative society have at least three children at the time of their first purchase of shares; 2. that at least two-thirds of the lodgings in the tenement house are let to shareholders or their families.

The rate of interest on loans to co-operative building societies must not exceed $2\frac{1}{2}\%$. The loan is made by means of the opening of a credit account. The co-operative society hires houses or land at a minimum rate of $3\frac{1}{2}\%$, and requires from every lodger a monthly sum, as rent and payment for his shares, equal to the monthly instalment that would have to be paid by the co-operative society to the credit society on account of the sum due to the lodger if the interest were calculated at $3\frac{1}{2}\%$ instead of $2\frac{1}{2}\%$.

This working in concert of co-operative cheap dwelling house societies and real estate credit societies is of good augury for the acquisition of small holdings; the one society being supplementary to the other: the co-operative societies benefit their members by enabling them to purchase land at a low price, act as intermediaries between the borrowers and the credit societies both as regards loans and the payment of monthly instalments. Their part in a social point of view is therefore of great importance as is proved in practice every day. As evidence may be adduced the real estate credit society of Loir-et-Cher which has lent 40,000 francs to the Bois Homestead Society which is a Co-operative Cheap Dwelling House Society.

(To be continued)

Part IV: Miscellaneous

RUSSIA.

THE GREAT AGRARIAN REFORM AND ITS RESULTS : FROM 1907 TO 1914.

(Continued) (1).

B. RESULTS OF AGRARIAN REORGANISATION IN RUSSIA, BETWEEN 1907 AND JANUARY 1st., 1914.

A. Statistics of Applications for the Intervention of the District Land Commissions between 1907 and 1914.

From the date of the first application of the legislative measures in which the new land reform consists (winter 1906-1907) to the first of January last year, the total number of farmers who had appealed to the Agrarian Commissions for any kind of agrarian reorganisation was 5,032,780. These may be divided as follows, according to their social status :

Peasants	4,965,444	applications (2)
Small Landholders, not Peasants	58,531	"
Other Landholders	8,805	"
Total	5,032,780	applications.

1) See the number of this Bulletin for June, 1915.

2) Unless otherwise stated, all the figures given in this section are taken from the "Official Report of the Work of the Land Commissions up to January 1st., 1914" (Официальный отчет о деятельности земельных комиссий на 1 января 1914), published by the General Management of Agriculture and Agrarian Organisation (Petrograd, 1914). Let us observe, in this connection, that as a result of the adoption, since 1912, of new principles, in the valuation of statistical data (those indicated by us in § 5) and the modification of the statistical data for the preceding years in conformity with these new principles, there are only differences between the data published before and after that year. Of course these differences are merely apparent and solely due to a different interpretation of the various findings, always very condensed, under which the figures are grouped.

If we classify the applications presented by *peasants alone* according to the year in which they were presented, showing for each year the increase in the number of applications as multiple of the number of those of the first year, we obtain the following figures:

TABLE I. -- *Applications for Agrarian Reorganisation presented by Peasants between 1907 and 1914.*

Years	Number of Applications Presented	Increase, Shown as Multiple of the Number Presented in the First Year
1907	219,332	1
1908	380,691	1.73
1909	704,961	3.21
1910	630,347	3.00
1911	678,143	3.08
1912	1,226,225	5.57
1914	1,105,742	5.00

Let us observe once for all that in this table, as in all those that follow the number of applications presented by groups ("Mirs", villages, fractions of villages etc.) represent the number of "hearths" in each group. If for example, a village with *twenty* "hearths" applies for any work of agrarian reorganisation to be carried out, we have twenty applications, even if only one application is presented in the name of all the twenty heads of families concerned.

Classifying the applications according to the class of work to be carried out, we get the following results:

TABLE II. -- *Agrarian Operations Requested by the Peasants between 1907 and 1914.*

Nature of operations and Number by which they are Indicated (Cf. Table I)	Number of Applications (i. e. "Hearths")	
	Real Number	Percentage
I. Separation of Entire Villages	1,557,913	31.4
II. Fractions of Villages	166,414	3.4
III. Isolated "Hearths"	706,792	14.2
IV. General Division of "Mir" Land into Individual Holdings	1,526,441	30.7
V. Division of Land among Peasants and other Individual Owners	108,634	2.2
VI. Division of Land held Collectively among Peasants	200,531	4.0
VII. Readjustment of Land not Allotted	450,064	9.1
VIII. Elimination of Enclaves	248,605	5.0
Total	4,965,444	100.0

Only considering here the *fundamental* operations of agrarian reorganisation mentioned in § 4, we find that the applications for such operations represented alone about four fifths (to be precise about 79.7 %) of all those addressed to the Agrarian Commissions.

We find also that the number of applications for *collective* agrarian reorganisation (operations I and II), 34.8 % of the total number, is appreciably less than that of the applications for *individual* agrarian reorganisation (operations III and IV), representing alone 44.9 %. This absolutely contradicts the assertion of the opponents of the reform, mentioned above, that the Russian people could never be induced to give up the system of collective ownership of land as it existed in the traditional organisation of the *zeml.* And the contradiction is found to be more marked when we consider the total number of applications instead of the percentages.

Indeed the Table shows that of 5,000,000 heads of families (in round numbers) who have made application to the Agrarian Commissions, 41 % or 2,250,000, asked that the "*nadiels*" should be reorganised as individual holdings. To these, 3,500,000 (1) must be added, who, owing to the fact that no division of the "*nadiels*" had been made since 1861, were at the date of the promulgation of the new reform, *ipso facto* owners of their respective lots (cf. § 4). The total number of peasant "hearths" on January 1st., 1914 was estimated at 13,000,000 (2). This means that already, only seven years since the reform began, 44.2 % of all the peasants of the provinces to which the reform has been extended have abandoned the system of collective property, and that without any difficulty, since the number of those who have themselves made application for the purpose is considerably in excess of that of the peasants who have remained faithful to the collective principle.

Let us now go on to consider the work done by the Agrarian Commissions, examining it in the order indicated at the end of the last section.

B. *Statistics of the Agrarian Operations for which Preliminary Drafts have been made by the Organising Commissioners of the District Commissions.*

Of the 4,965,444 reorganisation operations applied for by peasants since by January 1st. of last year, 2,862,064 had reached the first preliminary stage, that is to say the first sketch had been drafted by the organising commissioners and submitted by them to the District Commissions.

Classifying these operations according to the different years, we get the following table in which we show for each year also the area in deciatines (1.0925 ha.) of the land affected by the operations :

(1) Exactly 3,489,898. See the Pamphlet "*La réforme agraire en Russie*", published by the Russian Chamber of Commerce at Paris, p. 16.

(2) See Вѣстникъ Финансовъ, промышленности и торговли, of April 5th., 1914, No. 11, 1900-187.

TABLE III. — *Agrarian Reorganisation Operations in the First Preliminary Stage, and the Area of the Land Affected.*

Years	Number of Proposals (that is of "hearths")	Area of Land Corresponding (in Deciatines)
1907	47,646	578,989
1908	118,903	1,094,628
1909	326,857	2,974,604
1910	415,692	3,896,934
1911	493,795	3,702,566
1912	741,473	6,625,580
1913	807,698	6,854,480
1907-1914	2,862,064	25,727,781

In order to show the work thus accomplished in seven years, let us observe that the total area affected by these 2,862,064 preliminary proposals is almost equal to the total area cultivated in the whole of the German Empire (23,501,900 deciatines) and the whole Kingdom of Denmark (2,361,500 deciatines) (1).

In order better to show the activity of the organising commission, which increases from year to year, let us take as units both the number of proposals outlined in the first year of the reform and the number of the deciatines affected. The work accomplished in the later years would then be represented by the following multiples :

TABLE IV. — *Operations Effected by the Organising Commissioners (In Multiples of the Work Accomplished in 1907).*

Years	Number of Proposals	Deciatines Affected
1907	1	1
1908	2.3	1.8
1909	6.3	5.1
1910	8.7	6.4
1911	7.4	6.7
1912	15.6	11.4
1913	17.0	11.8

(1) See the "Collection of Statistical and Economic Information in regard to Agriculture in Russia and in other Countries" (Сборник статистико-экономических сведений по сельскому хозяйству), published by the General Department of Agriculture and Agrarian Organisation. VIIIth Year (1915), p. 2.

This continual progressive increase of the work executed, the more remarkable as it far exceeds that of the applications shown in Table I, is due in the first place to the considerable increase in the number of Agrarian Commissions and organising commissioners. In 1908 the number of the latter was still only 863 in all. In 1913 it was more than 3,104. Of course the more considerable experience the commissioners of agrarian operations acquire from year to year contributes also to the acceleration of the work.

In the following table, the preliminary proposals drafted are classified according to the kind of operations the peasants desire, the various kinds of agrarian operations contemplated in the law being shown in decreasing order of the number of "hearths" the land of which is affected by the preliminary work of the organising commissioners.

TABLE V. — *Classification of the Proposals for Agrarian Reorganisation
Drafted between 1907 and 1914.*

Kind and Number of Operations (Cfr. § 4)	Proposals Drafted		Area Corresponding	
	Total Number of "Hearths"	Percentage of Total	Deciastines	Percentage of Total
I. Separation of Entire Villages . . .	967,995	33.8	8,872,586	34.5
IV. General Allotment of "Mir" Land . .	939,507	32.8	9,308,637	36.2
III. Separation of Isolated "Hearths" . .	407,417	14.4	4,254,213	16.6
VII. Readjustment of Land not Allotted .	187,660	6.5	623,130	2.3
VIII. Elimination of Enclaves	164,168	5.7	1,003,178	3.9
VI. Division of Land held collectively among Peasants and other Individual Holders .	77,531	2.8	765,419	3.0
II. Separation of Fractions of Villages . .	76,141	2.7	802,805	3.1
V. Division of Land Held Collectively among Peasants	41,645	1.5	107,723	0.4
Total	2,862,064	100.0	25,727,781	100.0

To sum up then, of 4,965,444 applications for intervention presented by them in these seven years by peasants alone, the agrarian commissions have succeeded in the preliminary examination of 2,862,064 or 57 %.

C. Statistics of Schemes of Agrarian Reorganisation Definitely Arranged for by the "Technical Expeditions" of the District Agrarian Commissions.

Of the 2,862,064 preliminary drafts made, as we have just seen, by the organising commissioners since the reform began, 2,040,606 had by January 1st, 1914 reached the second preliminary stage, that is to say, after having been examined by the District Agrarian Commissions and forwarded to the technical expeditions of these Commissions, these 2,040,606 drafts had been studied in detail, marked off on the soil itself according to the plans submitted to the parties concerned and then sent to the Commissions in their definite form. In other words 71.3% of the proposals drafted have been given definite form during the period with which we are concerned.

The area of the land affected by the 2,862,064 drafts was, as we saw, 25,727,781 deciatines. That affected by the definite proposals was 70.0% of this number, that is 17,944,648 deciatines, an area nearly equal to the total area of all the cultivated land of Spain and Portugal.

The following table shows the operations of the technical expeditions for each year with the number of deciatines affected.

TABLE VI. *Proposals Definitely Elaborated by the Agrarian Commissions and Area of the Land Affected.*

Years	Proposals Elaborated	Area Affected
1907	20,556	262,943
1908	86,381	789,502
1909	252,294	2,356,615
1910	345,316	3,150,825
1911	361,150	3,270,989
1912	431,735	3,705,562
1913	537,174	4,408,212
1907-1914	2,040,606	17,944,648

If we now classify these proposals according to the kind of agrarian operation, we get the results shown in the following table, in which we also give the number of deciatines affected in each case.

TABLE VII. — *Classification of the Proposals for Agrarian Reorganisation Definitely Elaborated between 1907 and 1914, according to the class of Operations.*

Kind and Number of Operation (Cfr. § 4.)	Proposals Elaborated		Area Affected	
	Total Number of "Hearths"	Per- centage of Total	Declinares	Per- centage of Total
IV. General Division of "Mir" Land.	794,367	34.5	6,969,094	38.9
1. Separation of Entire Villages	682,300	33.4	5,868,343	32.7
2. Isolated "Hearths"	310,163	15.1	3,225,943	17.9
VII. Readjustment of Land not Allotted	125,125	0.1	312,116	1.8
III. Elimination of Enclaves	116,387	5.8	619,202	3.4
II. Separation of Fractions of Villages	58,724	2.9	600,096	3.4
VI. Division of Land Held Collectively among Peasants	23,195	1.2	275,742	1.5
V. Division of Land among Peasants and other Individual Owners	20,435	1.0	65,812	0.4
Total	2,940,606	100.0	17,944,648	100.0

As we see from the foregoing tables, the work of the "technical expeditions" of the Agrarian Commissions is by no means less than that of the organising experts who first draft the proposals for readjustment of land. In fact, notwithstanding the considerable increase both in the number of applications for intervention presented by the peasants (Table I) and of the proposals preliminary drafted (Tables III and IV), the technical expeditions have none the less succeeded in intensifying their action in a still more remarkable degree (1), as we see from the following table :

TABLE VIII. — *Definite Proposals Elaborated by the Agrarian Expeditions.*

Years	Percentage of the Number of Applications for Intervention	Percentage of the Number of the first Drafts
1907	12.1	55.8
1908	18.8	70.1
1909	27.9	74.9
1910	36.3	78.1
1911	40.7	81.6
1912	39.0	73.2
1913	41.1	71.3

(1) Let us observe in this connection that the task entrusted to the "technical expeditions" is incontestably the most complicated, the lengthiest and most difficult of all those entrusted to any of the bodies charged to carry out the reform, since it includes the detailed working out on the soil itself according to the plan of all the readjustment operations carried out.

If it has been possible to succeed in such an effort it is in the first place to the Government the merit is due, for by the foundation of special schools it has rendered possible a continuous progressive increase in the number of the technical employees attached to the Agrarian Commissions. In 1907 there were only 650 employees; in 1908 their number had increased to 1,290, in 1909 to 3,271, in 1910 to 5,085, in 1911 to 5,450, in 1912 to 5,897, and at last in 1913 it had reached 6,397 or very nearly ten times what it was seven years before. Let us now consider the last stage of the action of the Agrarian Commissions.

D. Statistics of Proposals for Agrarian Reorganisation Definitely Approved by the Provincial Commissions and thus Legalised.

Of the 2,040,606 proposals for agrarian reorganisation definitely elaborated, as we have just seen, by the District Commissions and submitted by them for the approval of the Provincial Commissions, 1,493,968 in the period we are considering had reached the third and final preliminary stage that is to say they had been approved by the Provincial Commissions and had thus been legalised. This means that these Commissions have examined in detail and definitely approved 73.4% of all the proposals submitted to them.

The area of the land affected by the 2,040,606 proposals elaborated by the District Commissions was 17,944,648 deciatines. That affected by the proposals definitely approved was 72.2% of this, or 12,925,317 deciatines and was very nearly equal to the total area cultivated in Italy and Greece.

We give in the following table the number of proposals approved by the Provincial Commissions each year with the number of deciatines affected:

TABLE IX. — *Proposals for Agrarian Reorganisation Definitely Approved by the Provincial Agrarian Commissions between 1907 and 1914*

Years	Proposals Approved	Area Affected Deciatines
1907	12,611	132,448
1908	60,014	571,440
1909	205,082	1,858,444
1910	262,439	2,300,845
1911	319,084	2,952,433
1912	248,164	2,132,128
1913	386,574	2,977,579
1907-1914	1,493,968	12,925,317

1) Cfr. PREYER, W. D. Die russische Agrarreform, pp. 242 et sequ.

Classifying these proposals definitely approved according to the character of the agrarian reorganisation operations, we get the following table:

TABLE X. -- *Distribution of the Reorganisation Proposals Definitely Approved by the Provincial Commissions between 1907 and 1914, according to the Character of the Agrarian Operations.*

Kind and Number of Operations (Cfr. § 4.)	Proposals Approved		Area Affected	
	Total Number of "Hearths"	Percent- age of Total	Deciatines	Percent- age of Total
IV. General Division of "Mir" Land . . .	505,199	37.8	5,567,299	43.1
I. Separation of Entire Villages . . .	470,343	31.5	3,755,241	29.1
II. "Isolated" "Hearths" . . .	215,373	15.8	2,474,976	19.1
VII. Readjustment of Land not Allotted . .	86,512	5.8	207,216	1.6
III. Elimination of Enclaves	70,475	4.7	326,489	2.5
II. Separation of Fractions of Villages .	43,794	2.9	450,146	3.5
V. Division of Land among Peasants and other Individual Owners	13,987	0.9	53,799	0.4
VI. Division of Land Held Collectively among Peasants	8,285	0.6	89,971	0.7
Total	1,493,968	100.0	12,925,317	100.0

In view of the quite special importance the new reform gives to individual agrarian reorganisation, in the following table we shall indicate the importance of the proposals for this kind of reorganisation in the whole number definitely approved.

TABLE XI. - *Statistics of Proposals* for Individual Agrarian Reorganization Approved by the Provincial Commissions between 1907 and 1914.*

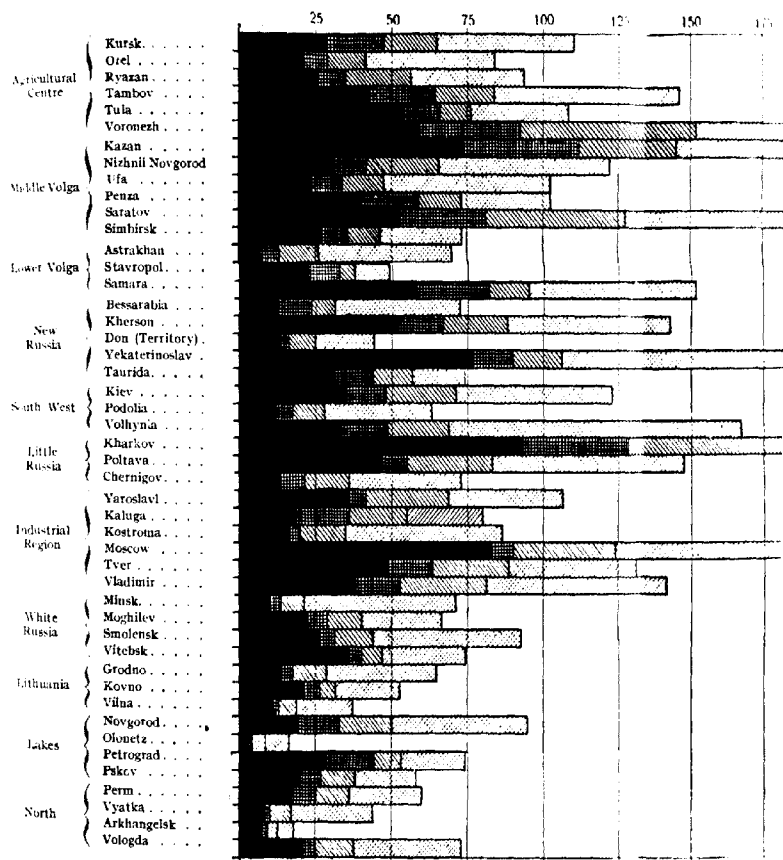
Kind and Number of Operations (Chapter)	Proposals for Agricultural Reorganization Approved					
	Number of Proposals ("Hearths")			Area Affected		
	Total	Individual Reorganization		Total	Individual Reorganization	
		Total Number	Percentage of Total		Total Number	Percentage of Total
IV. General Allotment of "Mir" Land	505,199	502,713	99.5	5,507,299	5,542,622	99.9
III. Separation of Isolated "Hearths"	235,373	235,373	100.0	2,474,976	2,473,582	99.9
I. Separation of Entire Villages	470,343	14,017	2.9	3,755,421	100,419	2.7
II. Separation of Frac- tions of Villages	43,794	6,881	15.7	450,146	65,349	14.5
V. Division of Land Among Peasant and other Individual Owners	13,987	3,734	26.6	53,799	8,994	16.7
VI. Division of Land Held Collectively Among Peasants	8,285	7,595	91.7	89,971	57,355	63.7
VII. Readjustment of Land not Allotted	50,512	10,496	12.1	207,216	36,460	17.6
VIII. Elimination of En- claves	70,475	3,283	4.6	320,489	27,071	8.4
Total	1,403,068	844,092	59.5	12,925,317	8,311,852	64.3





Let us finally complete this series of statistical tables by the following intended to give the reader a general idea of the progress made in the work of agrarian reorganisation both as regards the various classes of operations included in the work and the stage reached by them on the first of January 1914. With this table we give a diagram to show the stage of advancement of these operations at the above date, in each of the forty seven European provinces of the Empire in which the agrarian reform of 1906 has been applied.

TABLE XII. — *General Statement*

	Application for Intervention			Preliminary Stages		
	Peasants	Small Landholders not Peasants	Other Landholders	Peasants	Small Landholders not Peasants	Total
IV. General Division of "Mir" Land into Individual Hold- ings	1,526,441	—	—	930,507	—	853
III. Separation of Isolated "Hearths"	706,792	—	—	497,417	—	192
I. Separation of Entire Villages	1,557,913	—	—	967,995	—	241
II. Separation of Fractions of Villages	166,414	—	—	76,141	—	17
VI. Division of Land Held Col- lectively among Peasants .	200,531	38,460	3,320	77,531	12,402	1,48
II. Readjustment of Land not Allotted	450,064	9,027	3,287	187,060	4,486	1,217
V. Division of Land among Peasants and other Indi- vidual Owners	108,634	7,274	1,580	41,645	3,694	332
III. Elimination of Enclaves .	248,655	3,770	618	164,168	3,990	351
	4,965,444	58,531	8,805	2,862,064	23,072	4,93

Agrarian Reorganization Operations Carried Out in Russia by the Agrarian Commissions of
(in Thousands of Operations per Province).



 Reorganization Works Defined (M)
 Detailed Plans
 Preliminary Sketches
 Applications for Intervention (M)

The progressive decrease observed since 1909 both in the area set apart to be sold and the area actually sold is due to two quite different causes: on the one hand, to the fact that the largest areas belonging to the Crown are to be found in the provinces of Samara and Astrakhan where works of irrigation of very complete character, and, consequently, demanding considerable time for their execution are required, in order to render the land set apart for sale suitable for colonisation, so that, when once the areas with natural water supply have been sold, years have to pass before the remaining areas are "prepared"; on the other hand, the fact that, in order to avoid the speculation to which the low price of the land too often gave rise, the Agrarian Commissions have decided only to sell the parcels they have available to peasants, who, after they have cultivated them for two or three years as simple tenants, show that they are firmly decided to establish themselves definitely on the land and are capable of working it in a really proper way. This latter plan adopted in 1911 has of course temporarily reduced the amount of the sales. The figures for the year 1913 show that this transition period is already past and that, at the end of their probationary period, the peasants accepted as simple tenants have been able to arrange for definite purchase of the land.

B. "New Establishment" Subsidies and Loans.

However advantageous for the peasants may be the rearrangement of the innumerable parcels of former days as single holdings, this operation none the less entails, above all at the start, certain sacrifices of an economic character. The elimination of parcels uncultivated on account of their remoteness without doubt increases the area under cultivation, but on this very ground it means a corresponding increase in the amount of live and dead stock. The abolition of collective pastures and collective cultivation necessitates enclosure with hedges and fences. The concentration of the holdings as single farms necessitates transport thither of the various farm buildings formerly scattered over the numerous parcels. And in all these and many other cases the final result is often so considerable an expense that the peasant, no longer able or willing to meet it, prefers to renounce the benefits of readjustment.

To obviate the difficulty, the Government, since the application of the reform, has granted assistance in money to those peasants who desire that their farms may be reorganised on the most perfect though the most expensive system contemplated in the reform. The Agrarian Commissions are entrusted with the grant of this "new establishment assistance", now regulated by law of June 16th., 1912.

The "new establishment assistance" takes the two different forms of loans on favourable terms, that is long term loans at low interest, and free grants not to be repaid.

From the first application of the reform up to January 1st., 1914 the total number of heads of families who have applied for such assistance under one or other form reached the figure of 567,310. Of these 54 % that is 307,365 heads of families have had their applications granted: 257,680 under the form of loans altogether amounting to 25,649,210 roubles and the remaining 49,685 under that of free subsidies not to be repaid, of a total value of 1,170,992 roubles. The total amount of such assistance granted by the Government during the whole period under consideration was, therefore 26,820,208 roubles, or 71,341,753 frs.

The two following tables give details of this assistance.

TABLE XIV. — *Number and Percentage*
of "New Establishment Grants and Loans" made between 1906 and 1914

Total Number of Parents to whom Individual Holdings have been Assigned	Number of Applicants for Assistance		Number of Grants and Loans Made		
	Total	Percentage of these Entitled	Total	Percentage of Applicants Entitled	Percentage of Applicants
1,113,257	567,310	50.9	307,365	27.6	54.2

TABLE XV. *Classification of the "New Establishment" Assistance Granted between 1907 and 1914*

Years	Loans on Terms of Favour				Subsidies not to be Repaid				Total			
	Applications		Amount of Loans Granted		Applications		Amount of Subsidies Granted		Applications		Amount of Assistance Granted	
	Received	Granted	Total in Rubles	Average per Loan Granted	Re- ceived	Granted	Total in Rubles	Average per Subsidy Granted	Received	Granted	Total in Rubles	Average Individual Amount Granted
1907	6,858	1,449	56,006	38.6	1,811	582	20,199	31.7	8,669	2,031	76,205	37.5
1908	26,966	11,706	740,697	63.3	3,496	1,435	83,678	58.9	36,462	13,141	824,375	62.7
1909	78,711	43,061	3,731,490	86.6	9,777	4,890	216,277	44.2	88,488	47,951	3,947,767	82.3
1910	69,731	42,887	4,013,310	93.5	18,003	9,725	273,573	28.1	87,734	52,612	4,286,883	81.4
1911	91,294	48,567	4,911,040	101.1	25,354	15,468	270,870	17.5	116,648	64,035	5,181,910	80.9
1912	90,239	54,761	5,754,023	105.0	21,247	13,950	229,736	16.5	111,486	68,711	5,983,759	87.1
1913	110,479	55,249	6,442,650	116.6	13,344	3,635	76,649	21.1	123,823	58,884	6,519,309	110.7
1907-1914 . .	474,278	257,680	25,640,210	99.5	93,032	49,685	1,170,992	23.6	567,310	307,465	26,820,208	87.2

The last table reveals the rigorous application of one of the fundamental principles of the whole reform, that of only granting assistance entirely free in quite exceptional cases, so as to prevent the demoralising effect of such assistance in habituating the population to rely less on their own strength, energy and work than upon an assumed obligation on the part of the Government to assist the needy. Whilst the number and average amount of the subsidies not to be repaid diminish from year to year, those granted under the form of loans on favourable terms, on the contrary, increase both in number and in average amount, and in such proportion that, in spite of the decrease in the free subsidies, also the total amount of "new establishment" assistance continually increases.

§ 8. CONCLUSIONS.

The first conclusion we may draw from the study of all the tables given in §§ 6 and 7 is that there has been a really phenomenal activity displayed by all the executive authorities of the great agrarian reform. Even if we only consider the proposals definitely approved, that is to say works of readjustment satisfactorily concluded, the total area the Agrarian Commissions have succeeded in reorganising thoroughly during the first seven years of their existence none the less amounts to the immense figure of 13,000,000 deciatines, an area equal to that of all the cultivated land of Italy and Greece together, and of these 13,000,000 deciatines 3,000,000 were reorganised during the last year of the period (1913). This means that even if the activity of the Agrarian Commissions remained henceforth stationary at the present level of intensity, thirty four years would suffice to complete the agrarian reorganisation of all that still remains of the "nadel" land. But as, on the contrary, there is every indication that the work of the Agrarian Commissions will be further intensified, it is not exaggeratedly optimistic to anticipate that the Russian agrarian reform, the most gigantic work of land reorganisation known to history, will be terminated within twenty or twenty five years.

But, it will be said, has this activity, of an intensity previously unheard of, given results of corresponding quality?

It would be easy to answer the question by simply citing the united affirmative testimony of the principal economists who have studied the question in recent years, that is since the results of the reform became appreciable. Authagen, Hoetsch, Perger, Wieth-Knudsen and Wiedenfeld (1), to mention only the most recent non-Russian authorities, are unanimous in their admiration of the work of the Commissions.

(1) See AUTHAGEN, Dr.: "Zur Beurteilung der russischen Agrarreform" (in "Russlands Kultur und Volkswirtschaft"), HOETSCH, PERGER, and WIETH-KNUDSEN, *opera cit.*, and WIEDENFELD, K.: "Russlands Stellung in der Weltwirtschaft" (in "Russlands Kultur und Volkswirtschaft").

However valuable may be the opinion of these theorists, still we prefer that of the Russian people themselves, as they are more directly interested in the matter and in a better position to estimate the immediate consequences of the work of the Government. Now it is enough to cast a glance at the column in Table I showing the annual increase in the number of applications for intervention made by the peasants to the District Commissions to convince ourselves that the Russian people are indeed satisfied with the work of the executive bodies of the reform. In fact, if such were not the case, it is evident that the number of applications presented during the last two years, after the results obtained in the preceding years were known, would not have been alone equal to that of the applications of the same kind presented in the course of all the years before 1912 (1).

We have, besides, still more decisive evidence of the favourable opinion entertained by the Russian peasants in regard to the work of the Agrarian Commissions, provided by the statistics of the appeals against their decisions. In order not to weary the reader by further statistical data, let us confine ourselves to the statistics of the appeals against the decisions of the Commissions in 1913, which we give below :

TABLE XVI. — *Appeals Against the Decisions of the Agrarian Commissions in 1913*

Object	Agrarian Reorganisa- tion Property so-called	Pecuniary Subsidies for Reorganisa- tion	Sale of Crown Land	Land Operations through the Medium of the Peasants' Bank	Miscell- aneous	Total
Decisions	85,832	64,833	4,454	9,243	36,607	208,719
Appeals	2,778	1,337	146	267	208	4,817
Proportion of Appeals to Decisions	3.3	2.1	3.3	4.9	0.5	2.3

In our opinion this table contains the most definite judgment on the work of the Agrarian Commissions. If we take into consideration the complex nature of the operations executed by them, if we remember that these operations affect much more than the "nadel" land, their action even extending to the field of private landed property, whether individual or not, we shall see clearly that the comparatively insignificant number of appeals presented is the best proof of the tact, the equity and the care with which the conscientious work of all the various executive authorities of the reform has been carried out.

1) See Table 1.

It would be in the highest degree interesting to close the present study by a general criticism of the whole of the great reform which we have just outlined. Unfortunately it is even today as yet out of the question. Although the action of the Agrarian Commissions has been so energetic, the area of the land reorganized up to the present is still insignificant in comparison with the total area to be reorganised (1). And the same may be said in regard to home colonisation, the indispensable supplement of land reorganisation.

The work both of the Peasants' Bank, for the European provinces (2), and of the Emigration Bureau, for those in Asia (3), is only now beginning. It would then be absolutely premature now to judge as a whole a work of which the first effects are only beginning to show themselves.

The results obtained up to the present enable us, however, to approach one of the questions in regard to which the differences of opinion between those responsible for the Government programme and their opponents have been most radical and most violent.

We indicated above (4), as one of the measures richest in consequences of the whole reform, that of the suppression of the traditional Russian system of collective family holdings and the assignment of the lots reorganised as *personal* property to the head of the family alone. In this measure the opposition saw at once an injustice and a danger; an injustice, as in this way all the members of the "hearth" except the head of the family were deprived of positive rights of ownership without any kind of compensation; and a danger because the mass of peasants thus dispossessed would inevitably lead to the formation of an immense agricultural pauper class.

As regards the injustice, it must not be forgotten that under the ancient patriarchal system of collective family ownership, the "rights" of the subordinate members of the family over the collective property were of the most uncertain nature. They could not on any pretext be transferred to anyone outside the family, and even within the family they could only be exercised in accordance with the will of the head of the family, who alone represented the "hearth" in the all powerful meeting of the "Mir". If they remained in the family, the younger members had to work the collective land, with the sole reward of sharing in the collective life of the family.

(1) The situation of the land on January 1st., 1914, may be shown in round numbers, as follows:

Total area of "Nadel" land	117,000,000	Deciatines	
Area for which projects of reorganisation had been drafted	26,000,000	"	or 22.22
Area for which detailed proposals had been drawn up	18,000,000	"	or 15.39
" " " the proposals had been definitely approved	13,000,000	"	or 11.11

(2) Cfr. the pamphlet of the Russian Chamber of Commerce at Paris above quoted.

(3) Cfr. the article "Home Colonisation in Siberia in 1913", in the number of the Bulletin for March, 1913.

(4) Cfr. § 3.

On the other hand, they left home, for example to engage in industry, they could neither transfer their shares in the collective property to outsiders nor claim any revenue from them. In this last case, their rights became absolutely illusory and to deprive them of them was only depriving them of a fiction. In the first mentioned case, however, their "rights in the collective property" in fact reduced themselves to the mere right of participation in the collective indigence (1).

Theoretically, doubtless it is "unjust" to deprive the peasant even of a right of so little value. Practically, however, this injustice is remarkably reduced by the liberty accorded to the former "family serf", and the prospect opened to him of fairly paid labour.

In fact, we have just seen that, while in enjoyment of his "rights", the peasant is bound to the family, and obliged to work the collective lot without remuneration. When he is deprived of these rights, the peasant who is not the head of a family becomes, on the other hand, a free man, who may offer his services to the highest bidder. And as on the other hand this liberation deprives the heads of families of their former free labourers, indispensable for the cultivation of the farms now become their individual property and considerably extended in area (2), it follows that the "family serf" of yesterday will find somewhere, and now for regular pay, occupation assuring him of an existence materially far better than that to which he was condemned under the ancient system (3).

In other words, the suppression of the system of collective family property must necessarily end and, indeed, has ended in the formation of a class of *independent agricultural labourers*, corresponding in every way with similar classes in other countries.

Let us now see if there is really ground for fearing that this class may gradually degenerate into one of agricultural paupers.

Theoretically nothing justifies such an idea *a priori*. The suppression of rights in the collective family property or what comes precisely to the same thing, the emancipation from family serfdom, has modified the *conditions* of labour but in no way affected the number of rural labourers. There are today as many independent agricultural labourers in quest of work as there were formerly unrewarded co-proprietor serfs. And as the *area* of the land is in no way affected, there is no reason why it should not be able to support the labourers it supported before.

Practically, however, the matter is somewhat more complicated. As they are henceforth obliged to pay their labourers, the proprietors will of course endeavour to reduce their number as far as they can. The applications for work will therefore far exceed the number of available places, and

(1) To form an idea of what this "collective indigence" really was, see the section "Economic circumstances of the Colonists before Emigration" (§ 3) of the article "The Economic Results of Home Colonisation in Siberia", in the number of this Bulletin for May, 1915.

(2) By the union in single holdings, consequently capable of being completely cultivated, of the parcels the most remote of which, as we know, remained uncultivated.

(3) Cfr. Table XVII.

in the immense mass of those who lose their rights there will always be thousands and thousands who will no longer find employment, at any rate not on the farms that formerly supported them.

Thus the question is whether all these unemployed can find work elsewhere.

Two entirely different possibilities are open to the surplus farm labourers in the provinces in which the reform is applied. The first is colonisation, whether in Europe or beyond the Urals, which enables the most energetic of the unemployed to establish themselves as independent farmers and the less enterprising to find employment under them. The second is rural exodus, engagement in other occupations and especially in factory work.

As regards colonisation, we have already in several previous articles in this Bulletin indicated its enormous importance as an outlet for the surplus agricultural population of Russia in Europe. Thus, since the reform considered began, 3,500,000 peasants have established themselves in Siberia alone (1). In the Caucasus 600,000 deciatines of farm land, suitably "prepared", have already been distributed (2). Finally, in the European provinces of the Empire the Peasants' Bank on the one hand (3), and the Agrarian Commissions on the other (4), have transferred to the peasants who have lost their rights to collective property, 4,500,000 deciatines of land purchased from the Government or the Nobility, or an area equal to more than half that of the land adapted to cultivation in Italy.

In the absence of detailed statistics, the importance of rural exodus and the adoption of other than agricultural employments cannot be accurately shown in figures. Considering the remarkable development of industry in Russia (5), above all during the period with which we are concerned, there is certainly no exaggeration in estimating the number of the new openings created by industry alone at about half that offered by colonisation.

Let us further note that both colonisation and industry are still only in the first stages of their development. The possibilities of establishing themselves they offer the surplus farm labourers only increase from year to year, whilst on the other hand the surplus farm population, to some degree an independent fact of many years' standing, will soon gradually decrease, in proportion as new openings are offered it. There is, therefore, no doubt that if the measures taken by the Government against the danger of the formation of an agricultural pauper class have been sufficient up to the present, they will only be increasingly so in the future.

(1) Cfr. KLUMBERG, W.: Die Kolonisation Russlands in Sibirien.

(2) See the article already mentioned in the number of this Bulletin for October, 1913.

(3) According to an article by G. R. SNELLMAN on Russian Agrarian Reform (Agricultural and agrarian reform i Ryssland) in number 1-2 of the "Ekonomiska Samfundets Tidskrift" of the present Year (p. 73) the Peasants' Bank had bought, divided and resold to peasants 3,200,643 deciatines of land on January 1st., 1913.

(4) See above § 7. A.

(5) Cfr. FORTMAYER, op. cit.

Now, one of the best proofs of the non-existence of an agricultural pauper class in Russia today is provided by the following table, indicating the increase of the average amount of the wages of the rural labourers in the provinces in which the reform has been applied.

TABLE XVII. — *Average Rate of Agricultural Wages in Russia*
(in kopeks) (1).

Years	Working Day of Man and Beast	Working Day for Men		Working Day for Women	
		with Board	without Board	with Board	without Board
1901-1905	140	58	70	37	51
1906-1910	159	66	80	43	54
1911	170	67	87	45	57
1912	197	77	94	52	66
1913	213	87	97	58	73

It is evident that such a rapid rise in agricultural wages would have been impossible if the first result of the new great agrarian reform had been to give the country an enormous unemployed class of rural paupers.

And so we may consider the principal and most serious objections formerly made to the Government scheme as having been definitely refuted.

We shall not stop to consider the others, as they are all of minor importance. Let us confine ourselves in conclusion to saying that the most immediate result of the great agrarian reform of 1906 has been to re-establish more and more completely the tranquillity of the Empire, with the total disappearance of those agrarian disturbances which have desolated Russia, the formation of a large and vigorous class of independent peasant proprietors and a considerable increase in the general well-being of the other rural classes. What better proof can we desire of the efficacy of the group of Government measures in which the reform consists?

(1) Cfr. the "Recueil de données statistiques et économiques, sur l'industrie agricole en Russie", already mentioned, pp. 508 et seqq.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL
ECONOMY IN GENERAL IN VARIOUS COUNTRIES.

FRANCE.

1. — THE NEW TAX ON UNBUILT ON LAND. — The law of March 20th, 1914 on the tax on land built on and not built on and the tax on the revenue from French and foreign personal estate provides, in its first article that from January 1st., 1915 the proportions paid by the department, arrondissements and communes for the land tax on unbuilt on land will no longer be fixed and the tax will cease to be a fixed assessment of these divisions.

By the new law the tax on unbuilt on land is levied since January 1st, 1915 in proportion to the yield from the land as shown by tariffs established according to the nature of the crops and the land, in accordance with article 3 of a Law of December 31st., 1907; for the purposes of the tax the revenue will be estimated at one fifth less than it is. The tax on unbuilt on land is fixed (art. 6 of the law of 1914) primarily at 4 % of the taxable revenue established as above. The same law provides that, after 1915, centimes additional to the principal amount of the land tax (on land built on or not built on) shall no longer be collected. In regard to the additional departmental and communal centimes, article 26 of the law of March 29th., 1914 provides that they shall be fixed as follows: "The principal amount serving each year after 1915 as the basis on which to calculate the total amount per commune of the departmental centimes additional to the taxes on land built on and unbuilt on will be fixed as a proportion of the total taxable revenue, uniform for all the communes of the same department. This proportion will be the average proportion for all the communes of each department, for the two taxes together, of the principal amounts, which, according to the provisions in force previously to the present law, would have served as basis in 1915 for the calculation of the local taxes and the corresponding amount of taxable revenue actually included in the general lists for the year. The total amount of these centimes additional to the land tax shall be, for each commune, calculated according to the principles followed in calculating the total amounts of departmental centimes." The departmental and communal centimes additional to this tax came to 162,108,375 fr.

The transformation of the tax effected will have an appreciable effect on the public finance. The tax on unbuilt on land, before the reform

brought in 115,265,635 frs. to the State; since then it only produces 67,705,701 frs. representing a decrease of 49,799,934 frs. Of this amount, 67,705,701 frs. was levied on land attached to buildings and yards no longer taxable, under the new system, to the tax on unbuilt on land. Allowing for this deduction, there is in round numbers a decrease of 48,000,000 frs. or 2.21 % of the former tax, considering only the proportion due to the State, and in consequence of the provision mentioned above regarding the departmental and communal centimes, 30.28 % for the total tax on unbuilt on land.

The number of persons affected by this reform is considerable. The Minister of Finance has attempted to ascertain it. After deducting from the total number of the land tax payments (13,440,226), by communes: 1st. those for undivided holdings; 2nd. those of the same proprietor, with the exception of one; 3rd. those of landholders not domiciled in the commune (5,727,454); there remained 6,806,319 payments. This latter figure had to be subjected to further modifications. There had to be added: 1st. the number of the co-proprietors in cases of holdings undivided who had not been individually taxed; 2nd. that of the proprietors not liable to land tax in the commune in which they live; thus, a total number of 7,520,622 rural landholders has been arrived at. This is then about the number of those affected by the reforms, but the figure is liable to further correction.

(Summarised from an article by M. Edouard Payen in the *Economiste Français* of March 13th., 1913).

* * *

2. -- REQUISITION OF GRAIN. — The Parliamentary Committee on the Estimates, on May 6th. interrogated M. Viviani, the Prime Minister and M. Thomson, the Minister of Commerce on the proposals of credits for the service of food supply for the civil population. The following is the official communication on the subject:

"After attentive study of the situation of the stock of grain, made by the Committee after the statements made and documents supplied by the Prime Minister and the Minister of Commerce, it was ascertained that the amount now existing in the country and purchased abroad by the Government incontestably exceeds the requirements of the civil and military population up to August 15th. when the new harvest will begin.

To prevent speculation and all attempts to monopolise the grain and to avoid against an artificial increase in the price of bread, the Government, in agreement with the Committee on the Estimates, which urged its adoption of the measure it judged indispensable, has decided:

1st. To requisition the whole stock of grain in the whole country where it is to be found;

2nd. To organize in each department, through the medium of the prefect and the mayors, the retrocession of the corn requisitioned and the

sale of that bought at the same price fixed for the requisitions for the whole of France.

The consequence of these two measures will be, that in all the Communes, a decree of the Mayor will fix the price of bread at a low rate, almost the same for the whole country.

There is reason for congratulation that, thanks to these measures, the price of bread in France will remain very appreciably below what it is in other countries of Europe, without the consumption being at all limited, and without the quality of the bread being at all affected.

In pursuance of the above Ministerial instructions, the prefects in all the departments have issued orders calculated to ensure the requisition of grain and the supply of bread for the civil population, as follows: "From the 20th. of May, the price of flour, fixed from time to time by the prefect, shall be strictly in proportion to the cost price at the mill and the waste.

Similarly, from the 24th. of the same month, the price of bread, fixed in each commune by municipal decree, shall be based, in accordance with local usage, on the price of the flour or of the grain.

In accordance with the decision of the Government, the maximum price of grain shall be 32 francs the quintal, in barn or storehouse, on the market or in truck, and cannot be exceeded. Fifty centimes per quintal is allowed for carriage in the case of delivery at the mill.

Everyone in possession of grain, whether farmer or dealer, is invited to sell his stock to the millers of the district, according to their requirements, or, if there are no purchasers, to offer it at the prefecture.

The millers on their side must privately purchase enough to keep the mills constantly working, and, if they cannot do so, must advise the prefecture of what they need.

Owners of grain are informed that if they do not sell privately, the stock will be requisitioned by the Committee of Supply, by order of the prefect, in virtue of the special powers granted to him.

The farmers who have not yet finished threshing, in spite of the formal instructions repeatedly issued by the Government and the various facilitations granted for the purpose (Exceptional extension up to May 15th of the period for consignment to the threshing contractors, special leave to the territorial troops, offer of available threshing plant etc.), run the risk, if they do not at once complete the work with their own resources of having their corn requisitioned, in sheaf under conditions that will not be advantageous for them."

* * *

3. — FOUNDATION AND COMMENCEMENT OF WORK OF A NATIONAL AGRICULTURAL LABOUR OFFICE. — The institution of an Agricultural Labour Bureau has been considered by the Government from the beginning of the present war. From the first the Agricultural Department endeavoured to find work for those unemployed owing to the closing of factories. As at the time when the supply of labourers was increasing the Government had removed to Bordeaux, this official attempt was necessarily abandoned.

at several private organizations followed the example set and sought to find employment for the agricultural labourers. These were the French Farmers' Central Syndicate, the Paris-Lyons-Mediterranean and Paris-Orléans Railway Companies, the Belgian Labourers' Protection Committee etc.

At the Musée Social there was instituted, more especially for the employment of refugees, a committee for equalising supply and demand for labour which became latter the Refugees' Agricultural Labour Committee.

This Committee was a branch of the Refugees' Central Committee, formed at the Home Office, and was managed by a group of representatives of agricultural societies, under the presidency of M. Néline.

Each of these organisations rendered services in accordance with its means.

Then the Refugees' Agricultural Labour Committee requested the assistance of the Minister of Agriculture in developing its rudimentary organisation. The Minister at once promised his assistance, obtained an office for it in the Ecole des Beaux-Arts (*Fine-Arts School*) and, on March 15th., the National Agricultural Labour Office was opened, under the patronage of the Agricultural Department and the large central farming societies.

It began with the archives of the National Protection Society for the Employment of Agricultural Labourers generally and Foreign Labourers and of the Agricultural Labour Committee for the Employment of Refugees. As regards plant, the National Protection Society for Agricultural Labour placed at the disposal of the office all the necessary office furniture, equipment, typewriters etc.

To meet its expenses, the National Agricultural Labour Office has up to the present received :

- (1) A subvention of 12,000 frs. from the Agricultural Department;
- (2) From the Agricultural Societies, in order of payment : National Protection Society for Agricultural Labourers, 5,000 frs.; Agricultural Academy, 500 frs.; National Society for the Encouragement of Agriculture, 500 frs.; French Farmers' Society, 500 frs.

The Office has made its object and its work known by means of numerous communications to the Press, and posters to be seen nearly everywhere, with excellent results, for thus many applications for work have come in.

On the other hand, lists of French and Belgian agricultural refugees have been received through the Home Office.

These refugees are offered work individually. Attempt is made to make use of all available hands.

Between the fifteenth of March when the Office opened, up to the fortieth April, the following results had been obtained :

Offers of Employment	5,847
Applications for Employment	2,817
Offers of Employment to Single Men or Heads of Families and the Labourers accompanying them	2,194
Number of Children unfit for labour accompanying them	611

In order to decentralise its action and ascertain the requirements of the whole territory, the Office is trying to promote the foundation of an agricultural labour committee in each Department. A very large number of departments have already responded to its appeal, as there are already sixteen departmental committees.

The Office is now making a great effort to promote the immigration of foreign farm labourers. We shall return to the matter at an early date.

PROTECTORATE OF MOROCCO.

PROTECTION OF FORESTS IN MOROCCO. — To put a stop to the depredations of the natives in the forest of la Mamora, where they burn charcoal and sell the wood, tan and cork, the Department of Waters and Forests has prepared, in union with the officers of the Information Service of the districts concerned, regulations which have been embodied in a decree published in the Official Bulletin of the Protectorate for January 9th, 1915.

According to this decree, no one may burn charcoal in the Western portion of la Mamora, unless authorised by a special certificate showing his name, residence, the situation of the kilns and the period of his sojourn in the forest. This authorisation may not be given for a period of more than three months and is supplied by the local administrative authority after consultation with the Department of Waters and Forests.

Cork trees and generally all live trees in the forests can only be cut by those in possession of similar authorisation. Natives' rights are, provisionally, exempted from all charges.

Exploiters of tan and cork trees must obtain a similar authorisation. It is forbidden to bark standing cork trees. For transport and sale, a permit is required available for a maximum period of a fortnight.

The regulations in regard to tan apply in all particulars, except, of course, the rule in relation to standing trees, also to virgin cork and the produce of later barkings of cork trees.

To ensure the carrying out of these regulations, the Department of Waters and Forests has decided on the creation of three forest brigades consisting of three French officials and five natives to assist them.

(Summarised from the *Bulletin Economique du Maroc*, published by the Service Economique of the *Résidence Générale*, January-February, 1915.)

ITALY.

RECENT PROVISIONS FOR THE IMPROVEMENT OF MOUNTAIN PASTURES. — By Royal Decree (no. 589) of May 6th, 1915, the Minister of Agriculture, Industry and Commerce was authorized to grant prizes for the carrying

of works for the improvement of mountain pastures (1). These prizes will cover 25 or 30 % of the expenditure actually incurred. As works of improvement will be considered, the clearing of the soil of plants and stones, draining of marshes, irrigation, manuring of the soil with chemical manure, sowing of cattle foods, the erection of buildings for employees and for heating and storing produce, barns for hay, stables and sheds, and drinking fountains for animals, the construction of roads; the systemising and consolidation of the soil, the provision of rain and spring water; and, generally, every work directed in a manner recognised as efficacious for the establishment, systemising on scientific principles and utilisation of mountain pastures and the improvement of their production.

The expense of the prizes will be met out of an annual amount of 500,000 francs for five years, beginning with the year 1914-15, entered on the estimates for the work of the Government Forest Domain (2).

For the execution, of the above works of improvement of mountain pastures on land belonging to Communes, the Communes, in addition to the above prizes, may also obtain loans from the *Cassa dei Depositi e Prestiti* on terms of favour, at 2 % interest repayable in instalments in not more than thirty years. During the first five years the communes will only pay interest; in the 25 years following, with the interest they must pay the instalment of the debt. They will, however, always have the right to extinguish their debt at an earlier date.

The *Cassa dei Depositi e Prestiti* will receive interest of not more than 2 % on the amounts lent. The difference between this interest and that paid by the communes borrowing on terms of favour, will be entered on the estimates of expenditure of the Government Forest Domain.

The loans on terms of favour to be granted to the Communes may not exceed the total amount of 1,500,000 frs. per annum, for a term of five years beginning with the year 1914-15. The eventual balance out of the amount authorized either for the prizes or the loans shall go to increase the amount of the next year.

(1) See *Gazzetta Ufficiale del Regno d'Italia*, Rome, No. 115, May 8th., 1915.

(2) The fundamental principles of the Italian Forestry Legislation were dealt with by us in two special articles in the numbers of the *Bulletin of Economic and Social Intelligence* of July and August, 1911.

NOTICES OF SOME RECENT PUBLICATIONS
RELATING TO AGRICULTURAL ECONOMY IN GENERAL

AUSTRIA.

SCHMID (DR. FERDINAND) BOSNIEN UND DIE HERZEGOVINA UNDER DER VERWALTUNG
ÖSTERREICH-UNGARNS. (*Bosnia and Herzegovina under the Austro-Hungarian Government*)
Leipzig, 1914. Published by Veit & Co. large 8vo. pp. VIII + 832.

To the literature on the subject of Bosnia and Herzegovina, with which we dealt in this Bulletin when considering the Report of the Department of Finance of the Dual Monarchy (1) must be added this large volume of Dr. F. Schmid's, dealing very competently with the constitution and administration of the two provinces and supplying abundant statistics. It is an eminently scientific work, differing therefore both from the Departmental Report above mentioned, the character of which is essentially practical, and from the "*Wirtschaftlichen Führer durch Bosnien und die Herzegovina, herausgegeben vom österreichisch-bosnisch-herzegovinischen Interess. Verband in Wien*" (2) which, though rich in facts and information, is only a guide to the public economy, agriculture, finance and social life of the Balkan provinces subject to Austria.

Dr. Schmid, after illustrating the constitution of Bosnia deals in fourteen chapters, with the administration of the territories, introducing each chapter and every subject treated with an acute and exhaustive analysis of the legal institutions existing before the Austrian occupation. In this way the logical and historical connection between the present institutions and those previously existing is preserved and brought into suitable relief, so far as the earlier institutions served as the foundation for the new situation introduced by the Monarchy in the regions occupied.

We cannot occupy ourselves with the work in detail. It deals equally extensively with the administration of justice, and with the police, public health, agriculture, forests, mines, industry, trade and finance from the administrative point of view. Certainly what interests us most is the portion treating of the administration of agriculture and especially the chapter devoted to the agrarian constitution, but even this subject involves problems

(1) See Monthly Bulletin of Economic and Social Intelligence, Year V. No. 11. November 1914.

(2) Vienna and Leipzig. A. Hartleben, publisher, 1913, pp. 56.

§ 7. SECONDARY FUNCTIONS OF THE AGRARIAN COMMISSIONS

We already know that in addition to the preparation of the work of agrarian reorganisation properly so called, the Agrarian Commissions have many duties of other character which may be called accessory. For want of space, we shall only deal here and very briefly with the two classes of activity most intimately associated with the principal work, completing it and quite specially facilitating it, the sale to peasants who have no land of available land belonging to the Crown and the grant of subsidies and loans on favourable conditions intended to facilitate the passage of the small landowners from the ancient system to that introduced by the reform without too great expense.

A. Sale to Peasants of Available Land belonging to the Crown.

By Imperial Ukase of August 26th., 1906, the executive authorities of agrarian reform were charged to sell to peasants without land or not possessing enough for their needs that portion of the vast domains belonging to the Crown in the forty seven provinces of European Russia to which the new agrarian reform is applicable, which it is considered may be sold. The competent authorities decide together what land is to be transferred to the peasants, and the Agrarian Commissions fix the favourable conditions under which the transfer is made.

Before sale, the land is studied by the technical expeditions, who, after surveying, see to the carrying out of all the principal works of improvement required, the construction of roads to the holdings, irrigation or draining, clearing, establishment of public services, schools, churches, etc. (1). It is only when this "preparation" is completed that the areas in question are divided into colonisation lots and transferred by the Agrarian Commissions to those applicants for purchase whom they consider best entitled.

The total area of the Crown Domains placed at the disposal of the Agrarian Commissions since the Ukase of August 26th., 1906, to be ceded to the peasants who have no land, has been 627,892 deciatines (684,332 hectares, a little less than the entire area of all the land cultivated in the Kingdom of Norway), or about a sixth part of the entire area of the land belonging to the Crown in the forty seven provinces in which the reform is applied.

(1) Of course in the central provinces this "preparation" is, as a rule, unnecessary. In the East, however, and especially in the province of Astrakhan, where a considerable proportion of the land belonging to the Crown is reckoned to be available for sale, the preparation is in every way similar to that of the Siberian and Caucasian colonisation areas described in our studies on "Home Colonisation in the Caucasus from 1908 to 1912" (in the number of this Bulletin for October, 1914), and "Home Colonisation in Siberia in 1913" (in the number for March, 1915).

During the same period, preliminary works of improvement and drainage, as well as surveys undertaken in order to fix the price of the land, have been carried out over a total area of 557,117 deciatines. The total value of this enormous area was fixed at 52,533,815 roubles, giving an average estimate of 94 roubles 65 kopeks per deciatine (that is to say about 252 francs per hectare). A comparison with the valuations made at the same date by the experts of the Nobles' Land Bank in connection with the mortgage granted by it (1) or the average price per deciatine of the land purchased by peasants through the medium of the Peasants' Bank (2) will suffice to show how low the above estimate is. We give below the estimates made by the above banks:

Years	Nobles' Bank	Peasants' Bank
	roubles per Deciatine	roubles per Deciatine
1907	71	111
1908	102	121
1909	103	138
1910	138	128
1911	138	116
1912	159	112

Of the 555,117 deciatines thus "prepared" between 1907 and 1912, 358,701 were actually sold to the peasants for a total amount of 36,229,430 roubles. The following table shows how the amount of this business has varied from year to year.

TABLE XIII. — Sales of Available Crown Land to Peasants without Land

Years	Land set apart to be sold (Deciatines)	Land Sold	
		Deciatines	Price in Roubles
1907	21,225	9,664	1,149,230
1908	230,118	45,173	4,638,663
1909	135,510	139,355	15,083,663
1910	78,507	86,541	7,825,415
1911	64,287	48,272	3,845,307
1912	68,236	10,538	1,428,045
1913	30,009	19,158	2,259,105
1907-1914	627,892	358,701	36,229,430

(1) See the article "The Nobles' Government Land Bank," in the number of this Bulletin for September, 1914.

(2) See SNELLMAN (G. R.): "Agrarifrågan och agrarreformen i Ryssland" in the Ekonomiska Samfundets (i Finland) Tidskrift, p. 73 (Year 1915).

with vast and replete with difficulties, as for example the whole question of the enfranchisement of the Kmeti (*Kmetenablösung*), so difficult that it is not possible to give an idea of it without entering into too detailed an examination of the whole of this legal system, still too little known and studied.

In this connection we shall only say that the work of the Government culminated in the law of June 13th., 1911, on the permissive enfranchisement of the Kmeti; but of this law and the results of its application we intend to speak at greater length in a future article.

BRITISH INDIA.

ANNUAL REPORT ON THE PUNJAB COLONIES: For the year ending 30th September, 1914. Published by Authority. Lahore: "Civil and Military Gazette" Press, 1915. pp. 58, folio. price 7d.

In the January number of our *Bulletin* there appeared an article by Sir James Douie on "Canal Colonies in the Punjab", in which the most recent figures presented related to 1913. The present volume carries out information as to the progress of these Colonies down to 30th September, 1914, and although (like most Indian reports) it is severely critical and dwells more upon the problems which remain to be solved than upon the results already achieved, it shows none the less clearly that both the older and the newer canal colonisation schemes have proved remarkably successful. So successful, indeed, that in Lyallpur, proprietary rights in 10,000 acres of land changed hands at prices which yielded the vendors—the original grantees—a clear profit of 15 lakhs of rupees. The prices obtained for land sold at auction during 1914 show substantial increases over previous years, except in the case of the Upper Chenab Colony, where, however, it has to be noted that the land sold was of inferior quality. For land in the Lower Bari Doab Canal competition was extremely keen and an average price of Rs. 275-12-0 per acre was obtained for over 18,000 acres—a price which in the opinion of the Revenue Secretary is "somewhat inflated."

A certain proportion of the holdings or "squares" in the Colonies are held by grantees upon what are termed horse-breeding or mule-breeding conditions. The grantees in these cases are permitted to occupy additional "squares" of land upon condition that they engage in breeding mules or horses as remounts for the army. This part, too, of the various Canal Colony schemes has given excellent results and the Army Transport Officers have been highly pleased with both the number and the quality of the remounts secured. It may be mentioned that owing to the present war the army has made very severe demands upon the breeders in the Colonies.

We shall have occasion to make further use of the Report in an article in a future issue of the *Bulletin*.

SPAIN.

AVANCE ESTADÍSTICO DE LA RIQUEZA QUE EN ESPAÑA REPRESENTA LA PRODUCCIÓN ANUAL DE PASTOS PRADOS, Y ALGUNOS APROVECHAMIENTOS Y PEQUEÑAS INDUSTRIAS Y GANAS ANEXAS (*Statistics of the Wealth represented by the Annual Production of Pasture, Meadows and Certain Utilisations of the Land and Small Secondary Industries connected with Livestock in Spain*). Summary published by the Agronomic Advisory Commission. Printed by G. Hernandez' Sons, Madrid, 1914. 8vo, pp. 525.

To ascertain the average annual value of the agricultural wealth of Spain the Agronomic Advisory Commission has decided on publishing the annual reports of the agronomic engineers of the various agricultural regions.

The volume, the title of which is given above, is a summary of the reports for the year 1913 relating to meadows, pasture land and small derived industries. The work is of extreme importance both on account of its size and of the information it contains. According to the table the average annual production of all the meadows, pasture grounds and other utilisations of the soil in Spain is to be valued at 458,536,605 pesetas. Among the details contributing to make up this total, the most important are: the production of natural grass areas, where the hay may be cut, the value of which amounts to 145,145,747 pesetas and that of the pasture land amounting to 53,087,318 pesetas; immediately after that comes the production of meadows.

Among livestock improvement industries, first in importance come poultry improvement, the produce of which amounts to 172,188,509 pesetas a year; next comes rabbit improvement, the annual production of which amounts to 38,527,105 pesetas; then the improvement of pigeons, turkey-geese etc. The value of the total average production of all small livestock industries in Spain is 240,072,162 pesetas. Of the thirteen agricultural regions of Spain, those of the East and of Catalonia are the most important in regard to their livestock improvement industries, their average annual production being 40,008,316 pesetas and 46,023,357 pesetas respectively.

UNITED STATES.

UNITED STATES DEPARTMENT OF AGRICULTURE, Office of the Secretary. (1) Social and Labor Needs of Farm Women. Report No. 103; (2) Domestic Needs of Farm Women. Report No. 104; (3) Educational Needs of Farm Women. Report No. 105; (4) Economic Needs of Farm Women. Report No. 106. 4 pamphlets. Washington: Government Printing Office, 1914.

In July, 1913, Mr. Clarence Poe, a well-known agricultural writer and editor, addressed a letter to the Secretary of Agriculture in which he expressed the following opinion: "The farm woman has been the most neglected factor in the rural problem, and she has been especially neglected by the National Department of Agriculture." The matter thus raised seemed to be one which called for closer investigation, and towards the end

the Secretary endeavoured to find out, through the housewives of the homes of the Department's official crop correspondents, what really are the needs of the women on American farms. The housewives to whom enquiry was addressed were invited to write to the Secretary a general statement explaining their needs and suggesting forms which the work of the Department might take with the object of meeting such needs. The replies received — just over two thousand in all — were carefully analysed and the four reports (Nos. 103-106, Office of the Secretary) consist of classified facts from the letters written by these farm women.

In substance the reports contain little that is new to anyone who has made even a passing study of American agriculture. It did not need special enquiry to establish the fact that farm women need, and have a right to demand, more conveniences and more comfort in their homes, that they want better schools for their children close by these homes, that they want better roads, better facilities for travel generally, more time and opportunity for reading and recreation, some instruction in domestic economy and in hygiene, some opportunity for them and for their children to listen now and then to a good lecture or to good music, some prospect of enjoying an occasional holiday. These things are all well known already. But the facts from the letters bring them home to us very directly and enable us to realise, perhaps for the first time, how hard is the lot of the housewife on the average American farm. They help us to realise, too, that there is no panacea for the rural problem, that rural betterment is only to be achieved slowly, through the persistent efforts of many workers inspired by a desire to be of service.

GREAT BRITAIN AND IRELAND.

WIN (C. S.): *THE FARMER IN WAR-TIME*. Oxford Pamphlets, 101 (1915). Oxford, 1915. The University Press. 20 pages.

In this little pamphlet Mr. C. S. Orwin, the Director of the Institute for Research in Agricultural Economics, discusses the effects of the War upon agriculture and the ways in which the farmer can best adapt himself to the changed conditions.

Recognizing that it was of the first importance to increase production, Mr. Orwin urges that too much emphasis was laid upon the desirability of cultivating more wheat; that more wheat could not be grown without sacrifice of some other crop and that wheat is not the only food apparently to be entirely overlooked. The farmers soon decided that their proper use was to continue farming in the manner which experience had shown best adapted to their holdings, giving, in case of doubt, preference to out-growing. Acting on this principle, it only remained to them to do nothing undone to secure the maximum production.

Although agriculture does not offer much scope for the establishment of new industries in commodities for which the country has hitherto relied on enemy producers, there is one exception to this rule in the case of the

beet-sugar industry. It would be possible, Mr. Orwin thinks, to take advantage of the high prices now ruling for sugar to promote the cultivation of sugar-beet and the manufacture of beet-sugar. By the time prices turned to a normal level, the industry should be well established on a sound financial basis, and although large profits could no longer be expected, the farmer's economic position would be strengthened by the addition of another line of economic production.

Dealing with the labour problem, Mr. Orwin expresses the doubt whether it was wise to have encouraged recruiting amongst the young agricultural labourers. The effects of the shortage are already serious. The best way of meeting it would be the increased employment of agricultural machines. There are many labour-saving appliances which are by no means costly, and, for obtaining the more expensive machinery, the farmers could have recourse to co-operation. The war has not been the cause of the labour difficulty: it has merely brought it to a head. "It may be," says the author, "that the great disaster in which we are involved may be a great and much-needed stimulus to the further industrialising of British agriculture, and may do more to solve the problem of the rural worker than could have been accomplished in a generation by the operation of ordinary economic forces."

ITALY.

INDICE ECONOMICO (*Economic Indexes*). Published by the Department of Agriculture, Industry and Commerce. Rome, Bertoldi, 1915. pp. 45.

This is a collection of economic indexes published by the General Inspector of Commerce, to show the degree and the direction of the change in the conditions of the national economy by means of a series of figures indicative of certain fundamental functions of the economic life. The collection includes five groups of data, namely: 1st. Money Market; 2nd. State Finances; 3rd. Business; 4th. Commerce and Industry; 5th. Conditions of the Working Classes. The first group is divided into eleven series of figures relating to the rate of discount of the institutes of issue and larger private institutes, the average monthly rate of exchange, the average quotations for Italian Government Securities etc. The third group contains four series of figures (transactions of the clearing houses, taxes on business transactions, graduated stamp tax on bills of exchange and other commercial bills, railway traffic). The fourth group consists of ten series of figures showing the fluctuations of foreign trade, importation of coal and material for manufacture, exportation of partly manufactured goods, the rate of the principal industrial securities for groups of industries in the years 1912, 1913 and 1914. Finally, the fifth group dealing with the conditions of the working classes contains figures relating to postal savings, bank deposits, consumption on the part of the working classes, the price of wheat, Italian oversea emigration and industrial and agricultural strikes.

RUGGERI ALFREDO, gerente responsabile.

